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The General Principles of Abdominal Drainage.

By Geo. S. Brown, M. D.,

Birmingham, Ala.

The history of abdominal drainage and the evolution of scientific thought on the subject well exemplify or rather parallel what has taken place along all other surgical lines.

Thirty years ago Gross and other great surgeons thought surgical science and art had reached their limit of growth and so perhaps they had under the then existing conditions, but when evolution reaches a limit revolution inevitably follows; some entirely new principle is discovered that gives science a new direction and by consequence, art new vigor.

Lister tumbled down old idols, destroyed laudable pus and brought chaos; a Babel of surgical confusion arose; thousands vociferated in the forum and in print, offering perfect plans for the cure of all surgical ailments. Out of all that multiplicity of surgical offerings system and simplicity have grown again. Redundant, absurd and insane plans for a perfect technic have been tried and abandoned, and we have now worked down to the one best procedure in many cases and to a few simple ones in nearly all.

We have learned that no plan for aseptic technic can be perfect and like the religious devotee who leads the best life he can and endeavors to render innocuous his final shortcomings with prayer, so we do the best we can in an aseptic way and leave the rest to drainage.

Drainage of the abdominal cavity, the subject of my paper, has been so absorbing in its interest that surgeons have for years now given it more attention than perhaps any other subject.

After oceans of ink and much talk have been expended we have, here as elsewhere, learned a few simple truths which are, for the most part, sure guides in this branch of our art. It is an art. The study of medicine is a science, but the practice of it always has been and always must be an art.

As the painter has his talent, education, the impress of the old masters and his knowledge of canvas, paints, lights, and shadows to exercise his judgment upon in making a picture, so we have the voices of authority representing the experience of others, our own experience and our knowledge of surgical principles, physiological chemistry and bacteriology to help us practice our art in the particular case before us.

It was thought when medicine, influenced by Lister's discovery, was first assuming the dignity of a science, that the more scientific it became the less of an art the practice of it would become, but we now know that the more strings we have to our scientific bow, the more subtle, delicate and refined becomes our art, that skill and judgment with which we apply our knowledge to the cure of disease.

We learn that there are many voices of authority; that some are radical and some conservative is inevitable; some of sonorous authority, for instance, say "I never drain;" when questioned about it they admit they should have said, in the words of the song, "hardly ever," and when we see them operate we see that they frequently do. This shows that however dogmatic one may be in his haste to make others adopt his views, his practice is, at the worst, still something of an art. The dogmas of the books and of that most despotic of drones, the lecture platform of a medical school, can be but elements of our art to us, another string to our scientific bow that we use or reject as suits us at the time.

In this matter of drainage, as in others, a few well defined principles have been established and are accepted by all today.

At first it was believed that if the peritoneal cavity had been contaminated by septic matter it was necessary to drain in all cases. We did not stop to think that during the untold ages, this peritoneal sac must have been defending itself against the germs in the intestines and from

those from outside wounds; that owing to millions and millions of accidents that caused peritonitis nature must, by the process of natural selection, have been building up a bacteriocidal power to fight these germs. I may say in passing that it will always be profitable to us in the practice of the healing art to pause and consider that ages and ages before man ever held out a helping hand to his brother, nature had already treated successfully untold millions of the accident cases we see today; if not exactly gun-shot wounds of the abdomen, live wire burns and swallowed safety pins, still their equivalents, and that natural immunization, mechanical as well as physio-chemical began with the earliest vegetable and animal life on this planet, has been going on all the time since, and is today the only real factor in the cure of disease.

Remains of primitive man and animals have been repeatedly found with well healed fractures (cured by nature's postural treatment), and of course injuries to the soft parts must have been much more frequent. Such injuries of course often resulted directly or indirectly in the animal's death, but a certain number would completely recover and scar tissue would take the place of the wound in the bone or soft part. But in wounds of the peritoneum recovery must follow quickly as the traffic of the intestine could not for long be interrupted, hence nature built up a more powerful germicidal power in the peritoneum than in any other part perhaps except the serous lining of the joints, and this last is to be accounted for in the same way. A permanently stiff joint would tend to an early death. The greater the need the greater nature's effort to give protection.

In a state of society where the code was simply eat or be eaten and devil take the hindmost, injuries to the peritoneum and the serous lining of the joints must have recovered completely in those animals that survived to leave their impress on the race. Those whose serous membrane bacteriocidal power was low succumbed as unfit. They either died from the immediate effects of the infection or subsequently from imperfect healing (such as adhesions in the peritoneal cavity or stiff joints) which would tend to an early death, either from the imperfect nature of the healing itself, or because of the handicap in the competition with other animals. Muscles, skin and bone might heal and leave the animal as good as at first, hence the resistance of the parts and the power of repair are not as great as in the more important serous cavities.

When this bacteriocidal power of the peritoneum first began to be studied Halstead and others observed that the peritoneum could take care of almost any quantity of pure culture of virulent germs short of a sapremic dose, but if only a small potato culture was placed in the cavity diffuse peritonitis and death resulted. From this it was reasoned that the solid culture acted mechanically by knocking off or otherwise destroyed the endothelial lining of the sac, thus causing the infection to spread. We learned later, however, that destruction of endothelium tends rather to cause adhesions which check the spread of inflammation than to cause it. From this we arrived at the truth that the peritoneum can dispose of fluid cultures because the tissue cells can get at them, while a solid culture harbors the germs in such a way that they can go on multiplying indefinitely and throw out their toxins entirely protected from the attack of the tissue cells. For this reason a gauze sponge or a large silk ligature will always cause trouble if left in the abdomen, while infected fluid can be taken care of. Solid but impermeable material such as metal wire, bullets, silk-worm gut, or even a pair of forceps, even if covered with a virulent culture, might be left in the abdomen and cause no harm, unless perhaps they caused a pressure necrosis. The cells can quickly clean the hard surface of any impermeable material but cannot reach the germs that multiply in the interior of a sponge or other permeable mass. In such case of course the germs multiply until they are beyond the possibility of control and cure unless the offending mass can be removed in toto.

It will be seen therefore that the mere contamination of the peritoneum nor even an active degree of peritonitis do not necessarily call for drainage, but that the thickened necrotic wall of an abscess which cannot be removed, and acts as a germ-harboring foreign body, does call for it. Formerly we greatly feared the consequences of rupturing a pus tube during its removal, but we now know in the first place that such pus is usually sterile or nearly so, and in the second place that it might be quite virulent and cause no harm because in such case the abscess cavity itself is removed and no necrotic nidus is left. It is the necrotic area that cannot be removed that should be drained, and, too, any area that is so badly inflamed as to be in danger of becoming necrotic.

It is not necessary to drain the peritoneal cavity merely because it

has been contaminated, because of the superior resisting power of this organ, but this cannot be said of the muscle and fat of the wound of the abdominal wall. A gangrenous appendix can be removed and if there are no necrotic areas in the cavity the peritoneum can be closed without drainage, but with the utmost care the raw muscle and fat of the wound will become infected very often merely from the contamination of the appendix being drawn over it. In such contamination infection can nearly always be avoided by closing the peritoneum tightly and then draining the muscular space with a few strands of silk-worm gut.

The principles of drainage are more important than the selection of drainage material and the details of application; to some extent, however, certain principles are involved in these. If there has been extensive contamination of the cavity from a ruptured gall-bladder or perforation of any kind, or from a prolonged operation, there has been much handling of all the viscera, we sometimes wish to lessen the following sapremia by draining the whole cavity for a few hours. This is best done by using a glass drainage tube placed in the pelvis through a stab wound over the pubes. The glass being smooth and impermeable material is kept perfectly aseptic by the tissue cells while a rubber or gauze drain might cause suppuration along the track that would otherwise be clean. In local drainage where it is still possible that the peritoneum can take care of all the infectious material that is left, it will be well to use a glass drain because it will not interfere with nature's taking care of the infected area, and at the end of twenty-four hours if there is no suppuration it can be removed and the wound allowed to close, or if there is suppuration present it can be replaced by a rubber or gauze drain according to the amount of the pus.

C. N. Mayo never drains the cavity through the operation wound for fear of infecting the sutures that are used to partially close it, but makes a stab wound at the most convenient point for drainage—this danger of infecting the sutures depends very greatly upon the suture material used. If silk or cat-gut or other permeable material is used infection will occur in practically all cases where pus is present because, as we have discussed in the first portion of this paper, it offers safe harborage to the germs and safe conduct down and through the whole length of the stitch hole, which will invariably slough even when the

wound itself does not break down. On the other hand I have many times used silk-worm gut in this way and had it bathed for days in the most virulent pus without a single stitch hole becoming infected. Still it will be safest to make another small opening for the drain and close the operation wound tightly except for a few strands of silk-worm gut to drain the fat and muscle space. This is more necessary where the wound is closed by subcuticular sutures than when the interrupted are used, as the latter are less apt to leave dead spaces, have no buried cat-gut present and offer egress between the stitches to the post operative secretions. Still capilary drains can do no harm, and if they were used in all cases there would be no stitch abscesses in those wounds that are afterward dressed with plain sterile gauze. Wounds that are covered with rubber tissue, collodion or silver foil are most apt to become infected because such coverings prevent the absorption of the secretions by the gauze which keeps the wound moist and favors the development of the germs that were left in the wound and of those that habitually abide in the horny layer of the skin. It is a good thing to use capilary drain too because it necessitates dressing the wound on the third day. The first dressing always becomes slightly soiled by the post operative secretions. By the third day this has practically ceased and if now the soiled dressing is removed and clean gauze applied the wound will most likely be dry and healed when it is next looked at a week later. There is no reason whatever except over-confidence for allowing a clean abdominal wound to go seven or eight days before the second dressing.

Many surgeons use the terms pack and drain interchangably. This should not be, because a drain will not pack and a pack will not drain. Packs may be used in bone cavities and now and then an awkward hemorrhagic oozing necessitates it, but it should never be used for a drain. Indeed drains as a rule are made too large and are left in place too long. After a drain has been in a deep wound of the abdomen for several days it has been long the custom to shorten it gradually in removing it. It should be removed instead when the drain itself will hold about all the secretion that is thrown out and the granulations bleed a little. In such cases the sides of the sinus will fall together and union by third intension will ensue. It will be better to replace a larger drain with a smaller and then leave it altogether than to use the shortening up method in that we can dispense with the drain more

quickly in this way. If a pack is used for a drain the cavity of the abscess is prevented from collapsing by the encroachment of the surrounding tissues, the only way in which nature can obliterate the space. Again, if the pack is kept there for any length of time it causes the walls of the sinus to become very thick and to deposit more and more fibrous tissue that will be very slowly absorbed, that will be less and less able to unite by third intention (that is by granulation uniting to granulation) that will result in more and more permanent adhesions, and finally if it is kept in there long enough it will become a permanent sinus without vitality enough to heal. The idea of a drain should not be to conduct the secretions out of the wound but to insure the wound staying open so that the secretion can get out. A shallow abscess like a bone cavity or a wound from a resection of a rib should not have a drain put in it after the first day because it does only harm. Even if it has to fill up with the secretion before it can run over the secretion of the wound is less irritating than the gauze would be, and above all, the pressure of the gauze causes the deposit of an unnecessary amount of fibrous tissue which always delays healing.

Symptoms and Treatment of Pyonephritis and Nephrolithiasis.

By Gaston Torrance, M. D.,

Birmingham, Ala.

Surgeon to St. Vincent's and the Hillman Hospitals.

Stones may form in the tubules, calices or pelvis of the kidney. They may be multiplied or single; those composed of oxalate of lime are usually single; they may be rough or smooth, roundish or oval or they may be branched, corresponding with the calices.

Stones may occur simultaneously in both kidneys or in one after the other.

They are not common between 20 and 40 years of age and rarely occur in children (Cheyne & Burghard).

They are sometimes present without causing any symptoms. Erisendrath divides them into two classes:

1. Those in which the symptoms referred to the kidney appear as renal colic, hematuria or anuria.

2. The so-called quiescent cases in which there are no active symptoms.

ETIOLOGY.

A sedentary life, debility, the use of hard drinking water, an excess of nitrogenous food, occasionally an excess of vegetable diet, inflammatory condition of the renal pelvis or septic conditions of the urine in the cases of phosphatic calculi are among the chief causes. They are said to occur more often in dyspeptics and neurasthenics and are more common in males than in females (Cheyne & Burghard).

SYMPTOMS.

Pain, this is either of a continuous or intermittent dull, aching character, referred to the lumbar region, or there is a sensation of weight or pressure. It is generally spontaneous and may be increased by exertion or may occur at certain hours.

PALPATION.

There is no enlargement of the kidney unless it has become infected or there is a tubercular condition or neoplasm also; Israel found the enlargement in twenty-two cases of thirty due to infection or result of lipomatous changes.

Tenderness is found on bimanual palpation—more marked at the end of expiration. The pain is felt along the ureter or the bladder or penis and occasionally in the opposite kidney. The ureter is often more tender where it crosses the brim of the pelvis. Sudden extension of the flexed thigh or shaking of the lumbar region will often cause sudden pain in the affected kidney. The muscles are more tense and resistant on this side.

Urination may be more frequent and more urgent, causing a suspicion of cystitis. In some cases pain on urination is referred to side of the bladder corresponding with the kidney in which the stone is located.

Anuria may be the first symptom of stone and although this is probably the most frequent cause of anuria other causes must not be overlooked, as bilateral acute or chronic nephritis, obstruction of the ureters by tumors, operations of one kidney causing reflex anuria of the other or anuria due to kinking.

Infection and hyperpyrexia usually accompany an acute and complete obstruction.

The urine is as a rule acid and not offensive unless there is an infection. A careful examination will often show red corpuscles of the "shadow variety," those in which the hemoglobin has been washed out, and a trace of albumin; according to Israel these findings are characteristic of the aseptic cases. If an infection has taken place, pus in varying quantities is found. The presence of uric acid crystals is of no value.

Instead of a few shadow corpuscles the hemorrhage may be very profuse as the first indication of a stone and may make it very difficult to diagnose from a tuberculosis, neoplasm or chronic hemorrhagic nephritis; that due to stone is generally increased upon exertion which is not the case in tuberculosis and neoplasm. In tuberculosis we find pus and tubercle bacilli and in nephritis we find a larger per cent of albumin and casts. Both neoplasms and tuberculosis may be associated with stone.

All cases should be examined with the x-ray.

The different stones vary in the density of the shadows cast; the oxalates are the sharpest, the urates come next and the phosphatic stones are the poorest; pure uric acid stones scarcely ever give a shadow.

There may be calcified mesenteric glands or other calcarious deposits which will simulate calculous shadows.

DIAGNOSIS.

In the acute stages appendicitis, intestinal obstruction and gall stones are the conditions most likely to be thought of.

A stone lodged at the uretero-iliac junction can often be felt as an exquisitely tender point in the ureter and the distended ureter may be mistaken for an inflamed appendix. The psoas reflex is present—the thigh is flexed upon the abdomen.

Renal colic may be caused by kinking as in floating kidney, by plugging as in pyonephrosis, neoplasms, and tuberculosis; by inflammatory conditions in tuberculosis, acute nephritis, pyelitis, hyperacidity of the urine, nephralgia; stricture of the ureter or pressure of a tumor upon the ureter.

In the quiescent stage where there is no colic the symptoms are often referred to other organs until colic and hematuria occur; such cases are often treated as floating kidney, cystitis, gall-stones, chronic rheu-

matism, lumbago, intercostal neuralgia, dyspepsia, uterine or adnexal disease.

In some of these cases there are distinct symptoms referred to the kidney.

URETERAL STONE.

All ureteral calculi are probably formed in the pelvis of the kidney and many are passed without giving rise to severe symptoms.

When the stone is in the upper end of the ureter the symptoms simulate those of stone in the kidney, but when it is in the lower end of the ureter they simulate vesical symptoms.

The most frequent seats of impaction in the upper end are the uretero-iliac junction, where the ureter crosses the artery and at a point of narrowing about an inch below the lower pole of the kidney.

In the lower part of the ureter the juxta-vesical portion is the most common seat of impaction. This portion is just where the ureter enters the bladder and seems to have the same nerve supply and interfers with the vesical trigone, the pain is referred to the glans penis and the meatus in the female and along the line of the urethra; the pain is often severe and is felt while the bladder is contracting as well as at the end of micturition; pain in the scrotum and testicle or the labium major, in the groin and inner side of the thigh sometimes ascending to the kidney; the psoas reflex and tenderness at the uretero-iliac junction are absent and there is less liability to lumbar ache and fewer attacks of colic.

DETERMINATION OF THE RENAL FUNCTION.

Estimation of urea: The normal varies from 20 to 25 grammes in 24 hours; when the excretion falls below 16 grams. it is assumed that insufficiency exists and that the removal of a kdney would be inadvisable.

The phloridzin test is used by Casper of Berlin, Kummell of Hamburg and other German and American surgeons and is considered reliable. Kummell has used it in over a thousand cases.

Twenty minims of a one per cent solution is injected subcutaneously and the healthy kidney begins to secrete urine containing sugar in from 15 to 20 minutes; the sugar reaction is shown much later, or not at all in a diseased kidney. Sugar continues to be excreted for about three hours (Casper). Some cases have been reported in which it produced a hematuria or unusually prolonged glycosuria.

INDIGO-CARMINE METHOD.

This method has undoubted advantages over the methylene blue as its color is not so much changed by the urine.

A fresh four per cent solution in normal salt solution is injected into the gluteal muscles and the maximum excretion appears in twenty minutes and any delay means insufficiency of the kidney on that side

By using the cystoscope two streams of colored urine can be seen and the undoubted presence of both kidneys determined and the catheter can be more easily introduced.

CRYOSCOPY.

The idea on which this method is based is that the function of the kidney must be considered as osmosis.

Koranyi found that when the kidney function was normal there was a marked constancy of the osmotic concentration of the blood and that there was an increased concentration of the blood if there was a kidney disease.

All of this was based on the premises that while the kidney function was normal all of the nitrogen-containing molecules will be excreted by the kidney and that these will be retained in the blood when there is a disturbance of kidney function. The concentration is determined by the freezing point of the blood and the urine. The more concentrated a solution is the farther its freezing point is below that of distilled water. The freezing point of normal blood is 0.56 C. and the urine from 1.3 to 2.0 degrees below that of water and any marked lowering of this point proves the kidney to be unreliable.

The use of the cystoscope and segregator will both give reliable information as to the function of the kidneys and should always be used before operating upon a kidney for the removal of a stone or for septic conditions of the kidney.

OPERATION.

The usual lumbar incision should be made and the kidney delivered on the flank if possible; the vessels and the ureter should be grasped by an assistant to prevent hemorrhage or the slipping of a stone into the ureter. The pelvis and substance of the kidney should be carefully palpated—if the stone is of any size it can be easily felt. The kidney should be incised whether a stone is felt or not so that the inside of

the organ can be explored by the finger; needling is not only valueless, but is a waste of time.

The incision should be made about a finger's breadth behind the convex border where the anterior branches of the renal artery meet those of the posterior and the vessels are the smallest; the incision should be large enough to admit one or two fingers.

If the stone is round it can be easily removed with forceps, but where it is branched it may be necessary to break it in order to prevent laceration of the kidney substance. All fragments should be carefully removed and the kidney flushed out with hot water (105F.).

When a stone is found in a remote part of the kidney it is better to make another clean cut down over it than to lacerate the kidney by dragging it out through the original incision.

If the kidney is not infected the wound may be closed completely with buried cat gut sutures, otherwise a large drain tube should be passed down into the pelvis and gauze packed around it to prevent bleeding and the kidney should be sutured to the wound in the loin to prevent slipping of the tube; another tube should be used to drain the peri-renal region.

The lumbar incision may be closed with buried cat gut or through and through silk worm gut sutures.

A stone in the pelvis may be removed by incising the pelvis when it can be easily reached, these wounds heal quickly if closed with Lembert sutures of fine cat gut; if the pelvis is infected a tube may be used to drain it.

Stones in the ureter may be removed without opening the peritoneum when low down they may be removed through the vagina in the female or by an incision behind the rectum or in some cases above Pouparts ligaments when impacted near the brim of the pelvis the abdomen has been opened in some cases and another small incision made external to this so that the peritoneum was not opened at the point where the stone was removed.

In some cases the kidney is so much damaged that it is necessary to remove it, this is very likely to be the case where a stone has been previously removed from this kidney.

PYONEPHRITIS.

The kidney may become infected through the blood or from the urin-

ary tract; the hematogenous type occasionally develops in pyemia, septicemia, ulcerative endorcarditis, pneumonia, measles, scarlet fever, small pox, typhoid fever, and dysentery. Berg reports three infected kidneys following comparatively insignificant suppuration of the fingers and toes.

The uregenous or ascending infection almost always follows a cystitis.

There may be direct infection as in wounds of the kidney or it may travel to the kidney from adjoining organs as in inflammation of the liver, intestines and psoas muscle.

Where the kidney is not too much involved simple draining may be all that is needed, but nephrectomy is indicated if there is much damage.

The following cases illustrate the symptoms and treatment of these cases:

Mrs. L., age 23, first consulted me in April, 1907, suffering with a pyonephritis; the following is a history of her case: Her father died of dropsy (Cardiac ?) at 36 years of age; family history otherwise negative. Her general health has always been good. Had pleurisy and pneumonia about a year ago. Has been married two and a half years. Had a miscarriage at two months during the first year. Was delivered of a full term, still born child, five months ago. She had to be catheterized after the miscarriage and had a severe cystitis which has given her more or less trouble ever since. Two months after the beginning of the last pregnancy she began to have pain in the left side near the tip of the ninth rib, it was also felt in the back radiating to the hip. The pain is constant and is worse at night; she can not lie on this side. The bowels are constipated. She has some headache. Physical examination negative except that the left kidney is exquisitely tender and produces nausea on palpation. The kidney does not seem to be enlarged. There is some swelling of the face, feet and legs in the morning; slight edema of the legs. Her color is a dirty yellow. She has lost some in weight. Blood examination: hemoglobin, 85 per cent.; reds, 3,560,000; whites, 16,000;

Mononeuclear	27 per cent.
Multineuclear neutrophiles	55 per cent.
Eosinophiles	15 per cent.
Transitionals	03 per cent.
	100 per cent.

Urine: Straw colored, cloudy deposit, acid, 1012 spec. grav., no sugar, trace of albumin, pus, and a few narrow hyalo-granular casts, no tubercle bacilli. Numerous examinations were made with practically the same results as shown above. The urine was collected from each kidney separated by means of a Harris segregator and that from the right kidney was found to be perfectly clear and normal and that from the left was very cloudy and showed pus and other debris.

She had been under Dr. Parke's care for about a year and he had advised operation and was present when I operated upon her on June 18, 1907. We selected chloroform as being least likely to affect the remaining kidney. The usual lumbar incision was made. The kidney was adherent and was delivered with difficulty. The vessels and ureter were ligated together with a heavy linen ligature and the wound closed in tiers with heavy chromic cat gut with a small tube running down to the stump. The kidney was practically normal in size; the capsule was adherent in places; the organ was very dark in color and showed numerous points of degeneration in which scar tissue had formed in places; there were no pockets of free pus, but there were evidences of an inflammatory condition throughout the whole organ; and the pus collected from the drainage tube the following day showed numerous streptococci and staphylococci.

She voided about 20 ounces of urine in the first 24 hours and this gradually increased up to 40 ounces. No albuminous foods were allowed during the first week; water melon and various fruit juices were given freely. She made an uneventful recovery and all edema and swelling disappeared from the feet and ankles within a few days.

Repeated examinations of the urine since the operation show it to be normal and except for some slight digestive trouble she is in perfect condition now five months after operation.

Mrs. P., age 21 years, was referred to me by Dr. Peters, Aug. 27, 1907; the following notes are taken from his history of the case: she began to have bladder trouble at the age of seven, urination was frequent and painful; for the past few years it has not been painful, although frequent.

The involvement of the kidney began about two and a half years ago with aching pain in the right side, which would trouble her for a few days and then pass off. During the next two months she had

fever, sweats and chills, dyspnoea, cough and expectoration. About this time Dr. Rankin of Chicago, aspirated the right pleural cavity at the base posteriorly and found pus; soon after this she coughed up about a pint of pus. She lost 15 pounds in weight.

On May 20, 1905, the ninth or tenth rib was resected in the posterior part of the axilla; an opening was made over the kidney in the flank and another incision was made just external to the linea alba a few centimeters above the anterior spine of the ilium; drain tubes were introduced and allowed to remain for three weeks; there was a profuse discharge of pus for a time and there is a sl ght discharge from each one of these openings now.

She became pregnant about four months after this operation and gave birth to a strong healthy child. She consulted Bransford Lewis of St. Louis, some months ago and after using a cystoscope and catheterizing the ureters he advised nephrectomy.

During the past few months she has had considerable backache and the discharge from the s nuses still annoys her.

EXAMINATION.

She is quite thin and sallow; physical examination negative except there is dullness and weak breath sounds over the right base posteriorly and in the axilla; no rales; urine 32 ounces in the 25 hours acid, 1010, no albumin in the filtered specimen, no sugar, pus in abundance, epithelium, a few red cells and hyaline casts. Leucocytes 12,000.

The afternoon she was admitted to the hospital I passed a Harris segregator, but there was an almost absolute nervous suppression of urine and I decided to wait until the next morning and use it after the anaesthetic was given; both kidneys were found to be funct onating and I proceeded to remove the kidney. Ether was used as an aesthetic.

A free incision was made beginning about a finger's breadth below the twelfth rib and running downward and forward to a point just internal to the anterior superior spine of the ilium, which opened up the old abscess cavity; there were dense adhesions and the remains of the kidney was drawn up so far under the ribs and was so densely adherent that it was almost impossible to distinguish it from the necrotic tissues of the abscess cavity; I finally succeeded in delivering it and ligated the vessels and ureter together with heavy linen, leaving

the ends long, as is practiced by Mr. Freyer at St. Peter's Hospital in London. The wound was left open and packed with gauze. There was practically no shock from the operation. The following day she was bright and cheerful and was apparently in perfect condition, but only secreted two and one half ounces of urine in the first 24 hours; it was clear, acid, 1012, and a centrifuged specimen showed only a few pus cells; albumin one per cent.

The second 24 hours she secreted 19 ounces with only a trace of albumin; the third 24 hours she secreted 34 ounces; fourth 24 hours 38 ounces; fifth 24 hours 48 ounces.

Sparteine sulphate one grain by hypodermic and salt solution by enema were given every three hours for 24 hours and then the salt solution was discontinued.

No albuminous food was allowed for the first four or five days; fruit juices and milk were given freely.

She made an uneventful recovery and the wound was almost closed in six weeks when she returned to Indiana.

REFERENCES.

Berg, Medical Record, April 14, '06, page 582.
Leonard, Annals of Surgery, April, 1907, page 584.
Sir Willam Bennett, Phila. Med. Jour., Feb. 22, '02, page 365.
Leonard, Jour. Am. Med. Ass., Sept. 28, '07, 1094, page.
Casper's Genito-Urinary Diseases (Blakiston), 1907.
Cheyne and Burghard, Manual of Surgical Treatment, Vol. VII.
Binnie, Operative Surgery (Blakiston), 1907.
Johnson, Annals of Surgery, Vol. 35, page 402.
Rumpel (Hamburg), Freezing point of blood and urine in Renal Surgery, Annals of Surgery, Vol. 35, page 692.
Dowd, Annals of Surgery, Vol. 35, page 419.
Sahli, Diagnostic Methods, fouth ed., Saunders, 1906.
Eisendrath, Surgical Diagnosis, Saunders, 1907.
Lange, Annals of Surgery, Vol. 34, page 581.
Emerson, Clinical Diagnosis, Lippincott, 1906.
Lockwood, Surgery Gynecology and Obstetrics, Vol. II, page 26.
Kuemmell, Surgery Gynecology and Obstetrics, Vol. IV, page 21.
Kapsammer, Surgery Gynecology and Obstetrics, Vol. IV, page 589.
Cabot, Annals of Surgery, Oct. 1903, page 503.

Barnett, Annals of Surgery, Jan., 1903, page 36.
Smith, Annals of Surgery, May, 1904, page 748.
McGrath, Operative Surgery (Davis), 1906.
Bryant, Operative Surgery (Appleton), 1906.
Morse, Post Operative Treatment (Blakiston), 1907.
Ochsner, Clinical Surgery (Cleveland Press), 1905.
Von Bergmann, Practical Surgery, Vol. V (Blakiston), 1902.
Jacobson and Steward, Operative Surgery, Vol. II, Blakiston.
Reference Hand Book Med. Scien., Vol. V.
DaCosta, Modern Surgery, 5th edition, 1907.

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The Diagnosis and Clinical Types of Malarial Fever.

By S. H. Mann, M. D.,
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The diagnosis as a rule is, easily made except in the estivo-autumnal type, even without an examination of the blood.

The Diagnosis of Intermittent Fever. The diagnosis is made from the periodical paroxysm, which consists of a chill, high temperature and sweating. The cold stage generally lasts from fifteen to forty-five minutes followed by the hot stage, in which the patient has a flushed face, a full and bounding pulse, great thrist, restlessness, headache and sometimes delirium. The sweating stage begins with the decline of the temperature. With it the headache disappears. The paroxysms usually occur at the same hour each day. When they are decreasing they may be delayed from one to several hours; this is called procrastinating.

Masked malaria sometimes is encountered, in which the paroxysms are replaced by violent attacks of neuralgia affecting the supro- and infroorbital, intercostal, sciatic or other nerves, recurring at regular intervals.

The Diagnosis of the Estivo-autumnal Fever. This form so frequently corresponds in its symptomatology to typhoid fever, pyemia or septicemia, that its recognition may be difficult until the plasmodium crescents or pigment granules are found in the blood.

Typhoid fever does not usually begin with a severe chill, the plas-

modium is absent, and the Widal test is usually positive. Pyemia is characterized by chills, fever and sweating at less intervals; a focus of suppuration can generally be found; there is leucocytosis and the plasmodium is absent, and the spleen is not so greatly enlarged. Septicemia if chills be present conforms in character to pyemia. Acute tuberculosis presents symptoms resembling pyemia rather than malaria. The physical examination reveals a pulmonary lesion and the tubercle bacilli may be found in the sputum.

Pernicious Malaria. The course of this form differs from that if intermittent or remittent chiefly in its severity, and more particularly in the occurrence of severe gastro- intestinal, hemorrhagic or cerebral manifestations. In periodicity it may conform to either type, but this feature is often last. We have three types, the algid, comatose and hemorrhagic. The algid (congestive chill). This form is characterized by profound disturbance on the part of the gastro-intestinal tract. It may begin with a chill or chilly sensations, usually accompanied with nausea and vomiting and great prostration, followed in most cases by profuse diorrhea. The temperature is usually normal or subnormal, and the pulse fast and feeble; there is rapid and labored breathing; jaundice may develop and the case may resemble one of yellow fever.

The Comatose Type. The attack may be ushered in with a chill, followed by fever, but usually the chill is absent and the patient passes into a state of stupor or delirium that may run into a profound coma. The temperature reaches 106 or 107, and the condition may prove fatal in the first forty-eight hours. It is in this form of the disease that the cerebral vessels become obstructed by parasites.

The Hemorrhagic Type. In this type the malarial infection is manifested by a tendency to hemorrhage, particularly from the kidneys and mucous membranes. The gums are usually swollen and bleed spontaneously or upon slight irritation. There may also be bleeding from the nose, lungs, stomach and intestines, and ecchymosis appear in the skin. Jaundice is common in this type.

CLINICAL TYPES OF MALARIAL FEVER.

Tertian Intermittent Fever. It is due to a parasite which matures and gives rise to a paroxysm every forty-eight hours. When two groups of these parasites are present one group matures every day

causing a paroxysm every twenty-four hours. The disease is then known as double tertian or quotidian (daily) intermittent fever. This is the most prevalent type of intermittent fever in many regions.

Quartan Intermittent Fever. The parasite causing this type of the disease matures in seventy-two hours. Three kinds of infection are recognized, single, double and triple. In the single form there is a paroxysm on the first and fourth days. In the double form there is a paroxysm on the first day, none on the second, and one on the third and one on the fourth. On the triple quartan three groups of the parasites mature on different days, producing a paroxysm every day, or a quotidian intermittent fever. This form is usually recognized by the unequal intensity of the paroxysms.

Ectivo-Autumnal Fever. Two forms are recognized, a quartan and a tertian, one maturing in twenty-four hours, the other in forty-eight hours. This type differs from the intermittent in the greater length of the paroxysm and relative brevity of the interval. It also shows a tendency to become remittent, the intermission often becoming incomplete. As a rule it is of much greater severity. It is only in this type of malaria that crescents are found in the blood. The pernicious remittent fever is applied to the disease when such grave symptoms as hematuria, coma, severe gastrointestinal disturbances and jaundice appear.

Remittent Fever. This form is attributed to the sporulation of more than one group of estivo-autumnal parasites at irregular intervals, or to the presence of two or more different species. It may begin with an intermittent type of fever, but the intermission soon disappears and the fever becomes continuous with more or less marked remissions.

Malarial Cachexia. This may result from the frequent repetition of long duration of any of the other forms of malaria infection. There may be no parasites in the blood. The fever is very irregular, or it may be absent. The spleen becomes much enlarged, the blood is extremely anemic and contains much pigment.

Malarial Cachexia or Chronic Malaria. This condition develops after frequently repeated attacks of intermittent or remittent fever. The condition is seldom seen in the northern states. The msot characteristic symptoms are profound anemia and enlargement of the spleen. Fever is not always a feature of the condition, but it is more common

than chills. The blood count shows extreme anemia. The skin is of a dull, dusky yellow, or "muddy" color. The urine frequently shows the presence of bile pigments. The tongue is pale, broad, flat and flabby, showing the prints of the teeth, coated with a white fur, and the patient has mental depression and muscular weakness, sometimes accompanied by aching pains. Weak circulation and edema of the ankles often appear.

Dysentery, Etiology and Pathology.

By John Douglass, M. D.,
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Until recently it was customary to divide dysentery into three forms, epidemic, endemic and sporadic; or to separate it according to the clinical features into two main groups, acute and chronic or tropical. Since the discovery of the dysentery bacillus new light has been thrown on the disease and most authors agree to divide it into bacillary dysentery and amoebic dysentery. I shall speak principally of the bacillary dysentery, since amoebic dysentery is not so common in our work in this section. It is not a stranger by any means, however. I shall dismiss it with a few remarks.

Etiology.—Amoebic or chronic dysentery is caused by the amoeba dysenteriae, or the entamoeba histolytica, or commonly referred to as the amoeba coli. The amoeba dysenteriae is a unicellular, motile organism in size three to seven times the diameter of a red blood corpuscle. Its protoplasm consists of two zones, an outer colorless and an inner granular zone. The amoeba coli mitis is occasionally found in healthy individuals and in other bowel affections, in mucus enteritis, simple diarrhoea, and prostitis. In liver abscess Flexner thinks bacterial association probably has much influence on the pathogenic powers of the amoeba and may be associated with the bacillary dysentery. Two species are recognized, a virulent antamoeba histolytica and a benign entamoeba coli. The amoeba is found in discharges and pus from liver abscess.

The mode of transference is not definitely known, though the principal source is most probably drinking water.

Pathology of Amoebic Dysentery.—The lesions are almost always

situated in the large intestine, although the illeum is also involved. The first visible change is hyperemia of the mucosa, most marked in the descending colon and rectum. But the changes which produce the characteristic dysentery ulcer begin with infiltration and swelling of the submucosa, followed by necrosis which involves the overlying mucosa with its epithelium. Just how the amoeba reaches the submucosa it has not been observed. The circumscribed infiltration areas are oval or hemispheric in shape and project above the level of the surrounding mucosa. The submucosa presents a grayish yellow appearance and is soon thrown off in the form of slough. Now the ulcer takes various shapes, chiefly irregular, and less frequently oval with more or less ragged edges and undermined. The floor is rough or crater-like, formed by musculature or outer serous coat of the intestines. From the manner in which the ulcers are formed it is obvious that cellular infiltration (followed by necrosis) may occupy the submucosa for a greater or less distance beyond the border of the ulcer. In this way fistulous channels may be produced beneath the mucosa and connect two or more ulcers together. In very severe cases it may involve the entire mucosa of the colon. But in mild cases usually it affects the sigmoid, the rectum and hepatic flexures. Healing is attended with the development of fibrous tissue along the base and edges of the ulcer and secondary contraction of this new connective tissue, and may be productive of colonic stricture which is either partial or irregular.

The microscope reveals proliferation of the fixed connective tissue about the edges and in the base of the ulcer, and the presence of the amoeba in the walls and base of the ulcers, in the lymph spaces, and rarely in the bloodvessels. Pus can only occasionally be found. We hear and read a great deal about the liver in this disease. The liver may be the seat of prominent lesions. There are abscess, and may be single or multiple. The single or large abscess is usually situated near either the upper convex or lower concave surface. The abscess cavity is formed similar to that of intestines. The first stage fully developed the invaded part is a grayish yellow pultaceous mass. But in the necrotic stage the abscess cavity contains greenish yellow spongy material with beginning liquifaction. When pus is present is is due to secondary infection by pyogenic infection. The amoeba probably gains

entrance to the liver by metastasis from the intestinal foci. The parenchyma of the liver may be the seat of numerous circumscribed necrotic spots.

The lung sometimes shows changes similar to those of liver. They are of abscess due to direct extension through the diaphragm into the lung, usually the right lung. The contents of the abscess may be expectorated.

Bacillary dysentery is an infectious disease produced by bacilli dysenteriae. Pathologically it produces catarrhal and diptheritic inflammation with formation of neucrotic ulcers in the intestines. Clinically it is characterized by frequent bloody slimy stools with tormina and tenesmus.

Celli and Fiocca studied dysentery in the tropics and reported it to be caused by a specific variety of colon bacillus—namely, the bacillus coli dysentericus. This organism secretes a powerful toxin capable of producing typical dysentery when given by mouth or rectum, or injected subcutaneously into the tissues of animals. But this bacillus differs in its power in the coagulation of milk and the production of gas on glucose media. Notwithstanding they would identify this bacillus with the bacillus dysenteriae.

In 1898 Shiga found the bacillus dysenteriae in the epidemic of dysentery in Japan. And this organism showed marked agglutination when mixed with the serum of patients. Flexner, Strong and Musgrove studied dysentery in the Phillipines and isolated a bacillus in 1900 which corresponds in all marked points with the bacillus of Shiga. In 1903 Flexner and Holt demonstrated the Shiga bacillus in the diarrhoeas of children both in summer and winter. It was found in the stools, the bowel walls and mesentery glands.

Morphology of Bacillary Dysentery.—They are small plump rods with rounded ends very similar to the colon bacilli. They are usually single, but occasionally occur in pairs. They are non-motile (Kruse) and no flagellae can be demonstrated. There is no spore formation. The bacillus strains readily with ordinary aniline dyes, but is discolorized by Gram's method. The bacillus grows well on the usual culture. It was Kruse who first paid attention to the difference of the serum reaction between the bacilli of Shiga, Kruse and Flexner—the Manilla type. There is a bacillus known by Kruse as the pseudody-

senteric bacillus, that could not be distinguished morphologically nor culturally from Shiga bacillus, but it differed in the serum reaction. He found it in dysentery stools of insane patients. Its etiological significance is probably established.

Infection.—The most important source of infection is the individual suffering from dysentery. The organisms occur in the stools in unnumbered numbers, and through carelessness the clothes and other articles are soiled and carried from one to another. Therefore we find contact responsible for a large number of cases in epidemic dysentery. Second. Drinking water. We can see where it is a factor especially when the bacilli in the dejecta are thrown out and carried into streams where the water supply comes from. Third. The transportation and handling of milk, and other kinds of food. It is probable that the fly plays a part in the transmission of the disease. It is easy to understand how a fly can carry the infection from the dejecta of a patient to another person, or to food, or even the lip or mouth of a healthy person.

Unhygienic Surroundings.—Especially so in epidemic dysentery. It always accompanies wars, and is a frequent visitor to jails and prisons. Age plays its part, as with other disease. Shiga mentions especially the age of 20 to 30. Sex—Men more often than women. Season —Early summer to late autumn—June to October. However, winter season does not kill the germ. The bacillus may live the entire winter in an apparently healthy subject, he only suffering an occasional slight diarrhoea. Shiga thinks the bacillus dysenteriae may be present in the mucosa of a very mild catarrhal inflammation either as a terminal infection or the remains of a previously active infection, when clinical manifestation does not warrant diagnosis of dysentery. As to the disappearance of the bacillus from the stools.—From the foregoing statement it is hard to say, but some claim from thirteen to fifteen days. It depends on the severity of the attack, etc. Too early dismissal and lack of discipline in a convalescent patient might be cause of a new spread.

Pathology.—This is a catarrhal inflammation of the bowel. The large bowel is the usual seat. But it affects the cecum and ileum not infrequently. The bacilli remain in the folds of intestines and multiply under favorable conditions among which may be mentioned consti-

pation and other bowel disturbance. The mucus membrane reacts by inflammation which may be catarrhal, hemorrhagic or diptheritic, according to the stage and grade of the process. The elevated parts of the mucous membrane and folds are most affected, and from these the process spreads to the surrounding parts. The diptheritic infiltrated mucous membrane becomes necrotic and then there is ulceration. The process is the more severe in the parts more intensely irritated by the contents of the bowel, as in the flexures and rectum. In the beginning of the catarrhal period the surface of the mucous membrane has a grayish-red velvet like appearance. The mucous membrane becomes hyperemic, swollen followed by oedema. This is succeeded by necrosis of the epithelium, which is noticeable microscopically by the presence of flecks. Gradually the necrosia proceeds in the deeper parts and the whole bowel wall appears thickened. The lymph follicles of the mucous membrane become necrotic and purulent with sloughing followed by formation of the ulcer. The ulcer is not like the undermined, crater-like ulcer of amoebic dysentery. These ulcers have irregular borders, and in severe cases sloughing of the mucosa and submocosa down to the muscular layer, leaving bare places. The small intestines may be normal with slight reddening of the lower portion. In the so-called entero-dysentery the ileum may present the same appearance of the colon with swelling of Peyers patches. The peritoneum is also found, in some cases, inflamed, and adhesions frequently exist. The appendix may also be the site of infection. The mesenteric glands become swollen and show signs of hyperemia. The kidney may show injection of the surface vessels and cloudy swelling. The changes in the intestines predominate in the mucosa and submucosa in the catarrhal stage; microscopically you can observe the blood vessels dilated and filled with blood. In the lymph spaces groups of leucocytes are visible. In the early periods the mucous membrane shows coagulation necrosis with a fibrinous exudate. The submucosa is very much thickened. The borders of the ulcer are infiltrated. Numbers of bacteria are found in the inflamed mucous membrane, and especially in the necrotic portion. They are usually bacilli, but cocci are also found. The bacilli are found in small number in deeper layers and are very numerous in the glands and between the glands and glandular stroma.

The Treatment of Nephritis.

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The object of the science and art to which we are devoting our lives is the prevention and cure of disease. Not so very many years ago cure claimed most attention, was most sought, while prevention played a minor role. At the present day while we abate in no way our search for cure, prevention has come to the front and has of late probably been far more successful in checking the ravages of disease than cure.

Bright's disease is no exception to the rule, and I believe I can be of more use to you by dwelling first on measures of prevention. Although we have taken great trouble in the past to distinguish parenchymatous and interstitial nephritis, in point of fact all nephritis, except a few malignant cases of the diffuse form and suppurative nephritis, or surgical kidney, is parenchymatous, by which I mean the process begins in the living cells of the tubules and causes their ultimate destruction and disappearance, to be followed by a substitution of connective tissue. The chief difference lies in the fact that in the so-called parenchymatous nephritis the cell changes are more rapid, though less complete than in the interstitial form, and associated with a primary proliferation and increase of cells, resulting in a pathological product very different in appearance and size, at least in typical cases. In both cases the immediate cause is an irritant acting on the renal cells. The object of the preventive treatment is to avert the irritant, while the object of the curative treatment may be said to subdue the irritant and remove its remote results.

In order to avert the irritant we must know what it is. Its varieties are many and unfortunately are often quite undiscoverable. The best known of them are the causes of the infectious diseases such as scarlet fever, diphtheria, yellow fever, cholera, measles, typhoid fever, rheumatism, and even tonsilitis. Others are overeating and drinking, and especially an excess of proteid ingesta and alcohol, and to a less degree of tea and coffee. To these must be added toxins of the nature of pto-

maines generated in intestinal putrefaction and fermentation, all of which throw an excess of work on the kidney cells, resulting in their destruction. The result is imperfect elimination and consequent accumulation of toxic substances, and as the result of these, degenerative changes in the vascular system and in uremia in its various manifestations. As we prevent infectious diseases from occurring and are prompt in their successful treatment, we therefore eliminate nephritis. This covers a large number of cases.

After these come alcoholic excesses and excessive eating, also the ingestion of strong tea and coffee in large quantities. The last occurs more frequently among the lower classes than is commonly supposed. It is not uncommon for the servants of well-to-do families to have tea twice a day, at 11 a. m. and 4 p. m., in addition to the tea and coffee they may take in the morning and evening. By watching such cases as these, therefore, to which almost no attention has heretofore been directed, we may further cut out cases of nephritis, more particularly the chronic forms.

Moreover, there is no doubt that exposure to cold and moisture, whatever its mode of action, whether as a direct cause or favoring the operation of other causes mentioned, is responsible for a number of cases of acute nephritis, as when a man while overheated and perspiring becomes suddenly drenched, or, lying down on the damp ground, falls asleep and acquires an acute nephritis of forty-eight hours later.

So much for the preventive treatment; now as to the curative. The further management of nephritis is more easily considered by separating the acute from the chronic form. The treatment of the former is far simpler, followed by prompter results, and more easily disposed of—in fact, in a limited discussion need claim but a few minutes. Absolute quiet, a milk diet of rather poor than rich milk, purgatives, diaphoretics, and diluent diuretics are the measures usually efficient in the average case. For complications, including uremia and dropsy, the same measures judiciously increased are also applicable. I am still timid of the use of morphine for the control of convulsions, although less so in the convulsions of the co-called parenchymatous nephritis as contrasted with interstitial inflammation in which the danger is greater, while the difficulty in diagnosis in certain cases makes it no easy matter to decide whether the drug is safe or not. On

the other hand, chloroform inhalation to control convulsions, a few drops being placed on a handkerchief for inhalation, is an efficient and safe remedy for this purpose. The effect may be kept up by chloral enemas. As much to be recommended is venesection, followed by hypodermoclysis or intravenous injection of normal salt solution. The latter without venesection may be dangerous, and I pause to emphasize this statement: I think there is danger of overcharging the venous system and precipitating the death of the patient. Nor is it always well to push treatment too rapidly in uremic coma and convulsions. The condition is such an alarming one that we are inclined to try rapidly one remedy after another, when it would have been wiser to make haste more slowly and give nature a chance to assert itself.

A nicer judgment is often required to treat chronic cases than acute. In the first place there are quite a good many chronic cases better without any treatment except a simple hygienic and dietetic course, and this of a not too active kind. These are generally cases which have been discovered by the life insurance examiner, and were previously unsuspected. It is a great mistake to treat such cases actively. I usually say to such patient that it is fortunate the albuminuria was discovered in order that he may intelligently avoid the causes which may make him worse, and that, such precautions being taken, he is no worse off than if he had no albuminuria. Practically the same injunction may be given to similar instances discovered by the physician in a systematic study of a case. Here the advice should be to avoid exposure, fatigue, and overwork, to retire early and seek abundance of rest, along with a minimum but not exclusion of proteid food. Especial stress should be laid on moderate eating of all kinds of food and the exclusion of alcoholic drinks, while the free ingestion of liquids between meals should be encouraged, although this, too, may be overdone. Happily the red meat craze is dying out. I never did join in it. Red meats contain no more nitrogen extractives than white. Boiled meats are supposed to be slightly less injurious than roast, as in boiling some of the extractives are dissolved, but it is a matter of quantity rather than quality.

Warm bathing, especially at bedtime, followed by friction is a useful hygienic measure. It should be daily when possible. Cold sea bathing, especially long submersion, is harmful.

In the matter of medical treatment directed to the kidney, I know of

no drug which will create new renal cells to substitute those replaced by connective tissue, but conditions favoring nature's own efforts in this direction are those already mentioned. Our object must be to save the kidney from irritation. There is perhaps even in the mild degrees a tendency to anemia which requires the administration of iron, but this remedy in the shape of the well-known Basham's mixture is too carelessly administered and often does more harm than good by causing constipation and locking up other secretions. I do not give it as much as I used to. Iron should be given in small doses, and I often give the tincture of the chloride in combination with very small doses of bichloride of mercury freely diluted. The bichloride checks abnormal fermentations and the generation of toxic substances in the stomach and intestines. A regular, sufficient action of the bowels tends to the same end. Purgatives acting on the liver are especially serviceable in ridding the blood of toxic substances. To this end a weekly or biweekly dose of calomel is suitable. The free action of the skin diminishes the demand on the kidney. The iodides dilate the blood vessels and facilitate the onward movement of the blood, hence some physicians hold that the more or less constant administration of the iodide of sodium or potassium is necessary in every case of chronic nephritis. They are also a good diuretic in most cases. They may have some tendency to remove fibroid overgrowth. I use them a great deal. It is to the next stage, however, in which there is the constant presence of an appreciable quantity of albumin and numerous casts, to which these last remarks apply. You may want to use one of the newer diuretics, of which aceto-theocin is a good sample. It is one of the caffeine group, of which diuretin is also another. They are said to dilate the blood-vessels of the kidney as well as to increase the strength of cardiac contraction. The dose of theocin is three to five grains every six hours. It is a more reliable drug than diuretin, although I have known the latter to act very well, and one must have many strings to one's bow.

The complications of chronic nephritis include the dropsy and uremia of the acute form and call for much the same measures. They are, however, more difficult to relieve and ultimately carry off our patient.

In uremia venesection with hypodermoclysis, purging and sweating are the sheet-anchors. Another valuable measure is the injection high up in the colon of hot salt solution, three or four times a day, starting

with solution at 110 deg. F. Most efforts in this direction are failures because not correctly carried out. The hips should be elevated, a rectal tube passed high up in the rectum, and the water allowed to run in very slowly. It has even been suggested to have the fluid enter almost drop by drop. In this way large quantities may be introduced, but the temperature of the water necessarily falls. If there is not much edema, some of the hot fluid may be left in the colon; if there is much edema, the limbs may be scarified or Southey's tubes inserted and the water thus run off. Nitroglycerin is a remedy often very carelessly used. It is supposed to have a diuretic effect; I confess I have never seen any reason to believe it has any. On the other hand it is harmless and tends to relieve any high tension that may be present.

Very different is it when we have actually to deal with the high tension of granular kidney. A slightly higher arterial tension than is physiological is necessary to a proper function by a diseased kidney; but high degrees,say a pressure exceeding 160 milligrammes of mercury, are harmful. Here nitroglycerin is of signal service. One hundredth of a grain may be given as often as every two hours until the desired effect is produced. A favorite combination of Sir Lauder Brunton is potassium bicarbonate gr. xxv, potassium nitrate gr. xv, sodium nitrate one-half grain. In the opposite condition of low tension digitalis and caffeine must be substituted, and the sphygmomanometer may be necessary to determine which is present.

Cardiac failure must be added to these complications, increasing and aggravating both dropsy and uremia and being itself sometimes a cause of sudden death. It succeeds upon the hypertrophy so frequently associated with chronic Bright's disease, and is commonly the direct result of dilatation of the heart. Strichnine and digitalis or strophanthus are among the best remedies. In this condition the circulation must not be overloaded with water. The use of water must rather be restricted.

You will want to know what I think of Edebohols's operation of decapsulation for the cure of chronic Bright's disease. I believe the operation has a place in the treatment, but I would not call it curative. Like so many treatments it has disappointed expectation, and probably in consequence is too much ignored. I have thought the better class of surgeons have not given this operation enough consideration, probably, too, because the conditions supposed to indicate it are so purely in the

province of the physician. It is an operation whose suggestion must come almost wholly from the physician, and he is sometimes not as ready to suggest operation as he ought to be. I have seen life saved and prolonged by it, and I am sure this may happen again and again. The cases in which it should be done are generally those of parenchymatous nephritis with extensive anasarca, which refuse to yield to other treatment.

In interstitial nephritis the operation is less hopeful, as there remains less of the parenchyma of the organ to resume its function. There can scarcely be a doubt that the relief comes through diminished tension, illustrated by a case of my own, a typical case of chronic parenchymatous nephritis, in which the patient complained especially of a dull pain in the region of the left kidney along with a sense of aching fulness or distension in the same vicinity—in the patient's language, "a feeling as though there was an abscess there." In the fall of 1906 the kidney was exposed, its capsule stripped, and the organ replaced. In twelve days the patient was taken from the hospital, and a journey of 140 miles was made with little help on and off the trains. Previous to this there was large albuminuria, dark granular and oil casts. Succeeding the operation he gradually improved, and with the approach of spring began to take advantage of the fair weather to get out-of-doors, then gradually to resume business, until recently he wrote that he feels in as good health as he ever did, and outside of not being as strong as he would like to be, he has no complaints.

With what may be called the organic treatment of nephritis I have had no experience. Indeed, to suppose that nephritis can be cured by feeding its subject with fresh kidneys seems to be so absurd that the idea is repugnant to me. Still I may be wrong. Dr. Oliver T. Osborne in a paper on "Kidney Insufficiency and the Treatment of Uremia"* says he certainly has seen "life prolonged in nephritis by feeding fresh kidneys," though he has not had much results from nephritin tablets. He says also that "thyroid extract certainly aids in preventing convulsions in uremia and is," he believes, "the most efficient preventive of that symptom." I have never used it.

The saddest picture in the drama of Bright's disease is that of al-

*Journal of the American Medical Association, Aug. 24, 1907.

buminuric retinitis. It is certainly in the majority of cases the beginning of the end, and the shadow of darkness grows irresistibly until the valley is crossed. Can anything be done to avert it or to diminish it? To avert it there is nothing but what has been laid down in my previous remarks. To diminish it we must at least make an effort by mercurials and the iodides to arrest the process. Patients thus afflicted should be kept on the most stringent diet, and continuously on such doses of the biniodide of mercury, or, better, the iodide of sodium with the bichloride of mercury, as can easily be borne, and all strain upon the eyes should be guarded against. The progress of the disease varies, extending more rapidly in some cases than in others, but I sometimes think the prognosis of the ophthalmologist, who is so often the first to make the discovery, is needlessly grave. One thing I have learned rather late in life which is of extreme importance, and which I would strongly urge upon you, is to insist upon an ophthalmoscopic examination in every case of Bright's disease at least twice a year.

Renal headache is one of the most severe and sometimes gravest of symptoms. It occurs in two forms: first, in the shape of a more or less severe dull pain, often in the occipital region, lasting a variable time; and secondly, a short, sharp, shooting pain, which is often the prelude of uremic convulsions. Both are probably due to the causes of uremia, whatever these may be. The treatment is in all cases eliminative: in the first form, that of the uremic convulsion, at the time; in the second, by more deliberate measures. A remedy of this class very highly recommended by Dr. Samuel West, and with which I have had some experience, is pilocarpine nitrate or muriate, of which the beginning dose is one-twelfth grain rapidly increased to be sufficient to produce an effect on the skin. Dr. West regards it as an efficient remedy in uremia. These headaches are sometimes so severe as to require hypodermic injections of morphine to relieve them; but before this is dome, caffeine, nervous sedatives, and counter-irritation should be tried.—*The Therapeutic Gazette.*

Report of Secretary of Jefferson County Medical Society, 1907.

A. F. Toole M. D., Secretary.

The report will be brief, and will pertain merely to statistics as gathered from the minutes.

Membership.—At the time of the last annual meeting, there were 212 members in the Society. Since that date there have been added 31 names to the roll. Revision of the roll necessitated the dropping of 5 names, as per constitution, for non-payment of dues.

Death has taken away 1 member. We have now enrolled 237 names.

Meetings.—On February 11th, the time of meeting was changed, and the weekly plan took the place of the former semi-monthly plan. This has given us 48 meetings during the year.

Scientific Work.—The year's program as prepared contemplated and assigned 105 subjects for the so-called "Regular Essays," these subjects composing groups of kindred topics or symposia, for the various meetings.

Of this 105, 68 were read or delivered as prescribed; 25 more were taken up by substitutes provided in some cases by the absent essayists, in others by presidential appointment; 12 were omitted from consideration except in general discussion.

There were 3 volunteer papers. There were 4 addresses or papers delivered by invitation to speakers outside the medical profession; one being by Mr. Jas. Weatherly, upon medico-legal matters, and 3 by Messrs. Parker, Patton and Moody, upon subjects concerning doctor and druggist in their relations one with the other. There was one special address from Dr. Chas. W. Stiles, of the U. S. Public Health and Marine Hospital service.

There have been 49 cases reported in more or less detail by 24 members; in some there accompanied a demonstration of the living patient; in others, pathological specimens secured by operation or post-mortem or both.

Under *Miscellaneous Business* the Society has gone on record as favoring certain propositions or enactments, with positive action in certain instances securing or looking toward their realization.

Among these may be mentioned; adoption of weekly meetings; ef-

forts toward securing a permanent home; endorsement of the Greater Birmingham movement from a standpoint of sanitation; endeavors to secure representation in the State Association according to number of members; election of delegates to larger medical bodies; opposition to examination of under-graduates; measures for the suppression of flies; placing of whooping-cough and measles on the list of reportable diseases; and strict regulation as to the prescribing of whisky or other alcoholic drugs.

Report of the Board of Censors of the Jefferson County Medical Society.

Birmingham, Ala., December 23, 1907.

To the Jefferson County Medical Society:

In the beginning of the current year it became the duty of the society to elect municipal health officers for every incorporated town in Jefferson county. This being quite a long proceedure, the society asked the Committee of Health to nominate all of these officers except for the city of Birmingham. Your committee consulted with County Health Officer, Dr. J. M. Mason, and tried to select the physician in each town best suited for the position, all of whom were elected by the society at its next meeting.

Last year we made several efforts to have all of these municipal health officers to meet with the Committee of Health in order to discuss sanitary conditions in the various towns and try to remedy any defects in the health conditions. Some of these meetings were fairly well attended, and no doubt some good was accomplished by them, but greater interest should be taken in them by all the health officers. The committee believes that these meetings should be encouraged and held at least four times yearly.

The message of the retiring president, Dr. Morris, was considered and his recommendation concurred in to send blanks to every member of the society to be filled with names of physicians not members of the society, in order that new members might be gotten in, and also to keep up with physicians who do not belong to the society.

Our impression is that this was adopted by the society, but it has not been carried out.

Your committee concurred in the recommendation to try and have the county boards of examiners abolished, and this has been done, and these examining boards were discontinued the first of September.

We also concurred in the recommendation to try and get adequate representation in the State Association by delegates according to the membership of the county societies.

In February the city of Birmingham agreed to allow another sanitary inspector and your committee nominated Mr. J. W. Burson. He was elected by the society and served until recently when the city found it necessary to cut its force and expenses and he was laid off. In the opinion of your committee it is important that this society urge upon the city council the necessity of having Mr. Burson reinstated as the work cannot be properly carried on by two inspectors.

The city council of East Lake passed an ordinance some months ago prohibiting the sewage from the Casino grounds at the lake being emptied into the lake stream. Dr. Mason looked over the situation and gave as his opinion that that was the most sanitary method of disposal, as the town has no mains running to the trunk sewer. The Committee of Health did not concur in this and a motion was passed to instruct Dr. T. A. Jones, the city health officer, to have it discontinued.

The county jail has been inspected and recommendations made to install shower baths and improve the ventilation.

The city jails have been inspected and various recommendations made to improve their condition. An effort was made by your committee to have the shackles removed from the legs of the prisoners at night and this was agreed to by the city council, but it has not been done. These shackles are bradded on when the prisoner enters the work-house and are not removed until he serves his term.

Recently some trouble has come up between our city health officer, Dr. Harkness, and city bacteriologist, Mr. Duncan, due to the refusal of the latter to make examinations that were important to the health of the city. Your committee had several meetings and conferences with these two officers and tried to adjust the trouble, but nothing was accomplished as Mr. Duncan was unwilling for his work in any way to be supervised by the city health officer. The trouble arose from the fact that no laws have been passed governing the conduct of the city

bacteriologist. These rules or laws were prepared by this committee and submitted for passage as an ordinance, but from some influence on the committee of the council they were pigeon-holed and never brought before the council for passage. We have recently appeared again before this committee of the council and explained the absolute necessity of having the whole health system of the city under the supervision of the city health officer, and they agreed to pass such laws governing the conduct of the bacteriologist as we think necessary. These rules have again been prepared and no doubt will soon become the law, after which we hope to have no more trouble with our bacteriologist.

It is the opinion of your committee that the health system of the city will remain imperfect until all departments pertaining to the sanitation and health of the city be placed under the supervision of the city health officer, as he is the officer held responsible by the city for the proper sanitation. If after the election in January we become Greater Birmingham, the city health officer will have quite an onerous position and it will require all of a good man's time to attend to the duties of the office.

It is the opinion of your committee that Jefferson county should have a first-class physician as its coroner. The position is getting to be a very important and responsible one, and no one but a physician is competent to hold inquests and make the necessary examinations in most cases with which the coroner has to deal. We believe that it is the duty of this society, if in its power, to see that a physician is put in this position at the next election, and we recommend that some action be taken to that effect.

Up to the first of September, when the county examining boards ceased to exist, thirteen applicants were examined as to their qualifications for the practice of medicine. Of these eight were successful and five failed.

Respectfully submitted by the Committee of Public Health of Jefferson County,

E. H. Sholl, Chairman,
D. F. Talley, Secretary.

An Act to Establish a Colony for Epileptics and to Provide Means for Carrying the Same Into Effect.

Section 1. Be it enacted by the Legislature of Alabama, That there shall be established in the State of Alabama at such point as may be selected and designated by the commissioners to be appointed in accordance with the provisions of section 2 of this act, an epileptic colony, to be known as the Alabama Epileptic Colony; the object of such colony shall be to secure the humane, curative, scientific and economical care of epileptics, exclusive of violently insane persons who may require treatment at an insane hospital.

Sec. 2. The government and control of such epileptic colony shall be vested in a board of three commissioners to be appointed and commissioned by the Governor and the term of office of said commissioners shall be four years; but of those first appointed one shall hold office for four years, one for three years, and the other for two years from date of approval of this act, and their successors shall hold office four years from date of appointment; and appointments to fill vacancies occurring from any cause, shall be for the unexpired term only. The board of commissioners shall have power to elect a president and vice president from their members, to appoint a treasurer, a secretary and superintendent, who shall be a well educated physician; and, on the nomination of the superintendent, a steward, a matron, and as many assistant physicians, teachers and nurses as may be necessary, who shall hold their respective offices, and discharge their respective duties during the pleasure of said board; determine the annual salaries of the officers and agents, subject to the approval of the Governor; adopt such rules as may be necessary for conducting in a proper manner the business of the colony, and fixing the conditions of admission, support and discharge of patients and ordain and enforce a system of rules for discipline and government of the said colony.

Sec. 3. The commission shall perform the following duties: Select a site for such epileptic colony, purchase land or choose any suitable lands now belonging to the State for a site for said colony and erect suitable buildings thereon for the use of said colony; keep a full record of all their proceedings; open at all time to the inspection of the Governor of the State or any member of the Legislature; maintain an efficient in-

spection of the colony, and on or before the first day of December in each year, make to the Governor a report of the actual state of the colony at the close of the fiscal year, detailing the year's operations with such recommendations as may be necessary to accomplish the work for which the colony was designated, to be by him presented to the Legislature; have quarter yearly meetings at the colony and an annual meeting in the month of November each year, and such other meetings as the interest of the colony may demand.

Sec. 4. The board of commissioners provided for in this act shall within a reasonable time after its passage be appointed and qualified and at such appointment shall submit to the Governor and State Board of Health the location selected by them for such Epileptic Colony, the quantity and price of lands they may have selected therefor, and plans for suitable buildings for the care of three hundred patients and for residences for the physicians and other officers and attendants who shall care for such patients and the costs thereof; and on the approval of the Governor and State Board of Health shall proceed at once to purchase such lands, and to make contracts with lowest responsible bidders for the contruction of said buildings to an amount not exceeding twenty thousand dollars. Said commissioners may appoint a person, or persons, to have charge of the property devoted to the use of said epileptic colony until the same may be established as provided for in section eight and the salaries of the persons so appointed shall be paid from the appropriations authorized by this act. Said commissioners are further authorized to sell any personal property which shall come into their possession under the provision of section 5, which, in their opinion, is not needed for the purposes of said epileptic colony, and the proceeds of such sale shall be paid into the treasury of the colony.

Sec. 5. The commissioners of the Alabama Epileptic Colony are hereby authorized and empowered to receive and to hold in their official capacity and not otherwise, in trust for the State of Alabama, such authority and property titles to pass to their successor or successors in office, any grant or devise of lands, any donation or bequest of money or other personal property made for the use of said Epileptic Colony, and for the purpose of preserving and investing the proceeds thereof in notes or bonds secured by good and sufficient mortgages, or in other

safe securities, with all the powers necessary to carry said purpose to effect. And they shall have the power to expend any donations or bequests, or any part of the same, in the erection of new, or alteration of old buildings or lands belonging to the State for the use of said Epileptic Colony, provided that all such buildings shall belong to said State for use of the Epileptic Colony and be managed as a part thereof.

Sec. 6. The commissioners shall receive such compensation, while engaged in selecting a site for said Epileptic Colony, and purchase of lands therefor and the construction and equipment of buildings on lands selected and purchased, as the Governor and State Board of Health shall determine, but after the establishment of the Epileptic Colony they shall receive no compensation for services, but shall be reimbursed from the treasury of the State for the expenses incurred in the performance of official duty.

Sec. 7. When the buildings constructed under the act are so far completed that in the opinion of the commissioners the admission of patients may properly be made thereto, said commissioners shall so notify the Governor, who shall thereupon issue his proclamation establishing the Alabama Epileptic Colony and thereafter the commissioners may receive into the Epileptic Colony any person over five years of age who is subject to epilepsy, provided such a person be neither a criminal, an inebriate or violently insane.

Sec. 8. Persons subject to epilepsy who are five years of age or over may be admitted under special agreement to be supported in said Epileptic Colony by relatives or friends upon complying with the required forms of admission and paying the costs of support agreed upon; but no person shall be received in said colony as a patient without lodging with the superintendent a written request stating the full name, place of residence, place of nativity, occupation of the patient and degree of relationship to the patient of the applicant, and other circumstances between the applicant and the person for whom admission is sought, together with the certificate of two physicians who are legal practitioners of medicine in Alabama, setting forth the fact that the person for whom admission is desired is an epileptic and is eligible to admission to said colony. Such certificates shall be under oaths and shall be in accordance with forms adopted by the board of commissioners of said colony. All persons maintained at the colony at private charge, shall

in addition to the above requirements, furnish a bond payable to the treasurer or his successor in office in such a sum and with such securities as shall be approved by the superintendent and conditioned for the cost and support of the patient so long as he shall remain in the colony. No such person shall be detained for more than three months after having given written notice of his desire or intention to leave said colony. When any patient is received at said Epileptic Colony the superintendent shall report the particulars of the case to the commissioners who may investigate the same.

Sec. 9. Any resident of Alabama who is five years of age or over desiring to be admitted or for whom admission is desired, to the Alabama Epileptic Colony, under the provisions of section seven of this act, who is not of sufficient ability to pay the charge of his support in said Epileptic Colony, and who has no person or kindred bound by law to maintain him, of sufficient ability to pay such charges may apply by petition to any judge of probate qualified to commit insane persons, asking for the approval of his application as hereinafter provided. No such person shall be admitted in said Epileptic Colony except in accordance with the provisions of this act.

Sec. 10. Such petition shall be accompanied by a written application to the superintendent of said Epileptic Colony for admission thereto, signed by the commissioner and sworn to by him or by some relative or friend for him, setting forth his place of residence, and, to the best of his knowledge, his place of settlement, also stating that he is an epileptic and that neither he nor any other person bound by law to maintain him is of sufficient ability to pay the charges of his support.

Sec. 11. The petitioner shall give notice to the commissioners' court of the county in which the applicant resides, of his intention to bring such a petition; and should such application be received and cared for in said Epileptic Colony, there shall be paid in quarterly payments to the treasurer of said board of commissioners by the county treasurer, on the order of the commissioners' court of each county from which an indigent person has been committed to the colony, or transferred from an almshouse, State hospital or institution or county poor house where they were previously maintained at public expense the sum of two dollars per week, and in addition a sum not to exceed thirty dollars per annum for clothing for each patient received, as aforesaid; and the

certificate of the superintendent of the colony that such patient has been received and maintained shall be sufficient authority to sue for, and to recover in the name of its treasurer, from the county indebted, all sums that may be due for the support, maintenance and clothing of any such patients as in any action on contracts.

Sec. 12. The hearing of such petition shall be at such time and place as the probate judge shall appoint. If upon such hearing the probate judge finds that the petitioner is subject to epilepsy and is eligible for admission to said epileptic colony that his mental condition is not such as to render it legal to grant a certificate of insanity in his case; that neither he nor any person bound by law to maintain him is of sufficient ability to pay the charges for his support in such Epileptic Colony, and that notice has been given as provided in the preceding section, the probate judge shall approve said application for admission. A certificate reciting said findings and approval, signed by the probate judge, together with certified copies of the application for admission, the notice mentioned in section eleven of this act, and the certificate hereinafter required, shall be transmitted to the commissioner of said Epileptic Colony.

Sec. 13. The probate judge hearing such petitions shall not approve the application for admission until there has been filed with him the certificate of two physicians made as hereinafter provided. No one shall be qualified to make such certificate unless he shall make oath that he has been engaged in the practice of medicine in Alabama for two years next preceding the making of the oaths and that he is licensed to practice medicine under the laws of Alabama. Every such physician shall state in such certificate that in his opinion the petitioner is an epileptic and a suitable person to be received in said epileptic colony and shall specify the facts on which his opinion is founded substantially in accordance with the practice relating to certificate of lunacy.

Sec. 14. In all cases arising under the provisions of sections nine, ten, eleven, twelve and thirteen of this act, the probate judge, physicians and all other officials shall be entitled to the same fees as are authorized in the case of commitment of an insane person to the insane hospital, and such fees, together with the expense of transportation to said Epileptic Colony of any such patient whose application for admission thereto may be approved by the probate judge, shall be certified,

allowed and paid as provided by the statute of Alabama, in regard to the commitment of an insane person to the insane hospital.

Sec. 15. After the establishment of said Epileptic Colony, all epileptic inmates of the class mentioned in section seven of this act, who have been committed to an insane hospital may be transferred by the superintendent thereof to the said Alabama Epileptic Colony and when said board has reason to believe that said epileptic confined in any alms house or other place, is deprived of proper treatment or care whether such epileptic is a public charge or otherwise, it may cause the transfer or commitment of such person to the Alabama Epileptic Colony and said commissioners shall transfer from said Epileptic Colony to the State insane hospital such inmates as may be found violently insane, and requiring treatment therein. But no such transfer shall be made except upon approval of the superintendent of the Alabama insane hospital, whose duty it shall be to receive such patients as soon as they can be accommodated in those institutions.

Sec. 16. The charge for the support of the inmates of said Epileptic Colony as are of sufficient ability to pay for the same or have persons or kindred bound by law to maintain them, shall be paid by such inmates, such persons or such kindred, at a rate to be determined by the commissioners of said Epileptic Colony. The charges for the support of such other inmates as have no legal settlement in this State shall be paid by the State at the rate provided by law for the support of patients in the Alabama Insane Hospital.

Sec. 17. For the purpose of carrying out the provisions of this act there is hereby appropriated the sum of twenty thousand dollars for the establishment of said Epileptic Colony, and for its maintenance there is hereby appropriated the sum of ten thousand dollars annually, to be paid to the treasurer of said Epileptic Colony by the State treasurer on the warrant drawn by the State Auditor in favor of said Treasurer of said Epileptic Colony and directed to draw such warrants in favor of said treasurer at such times and in such amounts as requisitions may be made upon him by the superintendent of said Epileptic Colony, countersigned by the chairman of the Board of Commissioners. Provided, that the appropriations herein made shall not become available until the Governor shall decide that the condition of the treasury will admit of the appropriation being made.

Sec. 18. So far as this act authorizes the appointment of commissioners of said Epileptic Colony it shall take effect upon its passage;

in other respects it shall take effect on the first Monday in January, in the year nineteen hundred and eight, or so soon thereafter as the Governor may deem it expedient to issue his proclamation putting it into effect.

Sec. 19. The superintendent shall be the chief executive officer of the Epileptic Colony, and shall have the general superintendent of the colony, including furniture, fixtures and stock, the direction and control of all persons therein, subject to any by laws and regulations established by the manager; shall daily ascertain the condition of the patients, prescribe their treatment, appoint under regulations of the managers, necessary assistants for the several departments of Epileptic Colony required for the efficient carrying out of the intentions for which the colony was established; prescribe their several duties, fix, under such regulations, their compensation; discharge any, at his sole discretion, suspend for cause any resident officer; giving to the president of the board of commissioners written notice thereof, stating the causes; when it shall become the duty of the president to call a meeting of the board to consider and dispose of the matter; give such orders and instructions as may be necessary to insure good conduct, fidelity and economy in every department, enjoin and maintain discipline among all who are employed at the Colony, enforce strict compliance with such instructions and obedience to the rules and regulations adopted by the commissioners at their annual meeting in November of each year; in the absence or disability of the superintendent, the senior assistant shall perform the duties and be subject to the responsibilities of the superintendent.

Sec. 20. The treasurer shall have custody of all moneys, securities and obligations belonging to the colony; deposit in bank in his name as treasurer of the colony, immediately upon receipt thereof, all moneys counting to his hands for the use of the colony, and draw the same only in the manner prescribed by the by-laws; keep full and accurate account of all receipts and disbursements, and such other accounts as managers shall require, balance all accounts annually on the last day of October, and make a full statement of the balances, and an abstract of receipts and payments for the preceding year, and within three days thereafter deliver the same to auditing committee appointed by the board of commissioners while the committee shall compare the

same with his books and verify results by comparison with the books of the steward, and report their findings to the board of commissioners at the annual meeting in November of each year; the treasurer shall render a monthly statement of his receipts and disbursements to the auditing committee at the regular monthly meetings, which committee shall compare and verify them as aforesaid, and certify the result to the board of commissioners, who shall cause the same to be recorded in one of the books of the colony, and shall further render an account when required to do so by the managers; have authority to sue for and recover for the use of the colony in his own name, as treasurer of the Alabama Colony, and all sums of money that may be due to the colony from any source. No suit commenced for such purpose shall be abated by his death or removal, but proceed in the name of his successor in office. Upon receipt of any moneys belonging to said colony, the treasurer may acknowledge satisfaction thereof.

Sec. 21. The board of commissioners shall require of their treasurer, or any other appointee whose duty requires or permits him to take, receive or disburse any money belonging to the board of managers as such, or which may be appropriated by the legislature for the use of the colony, a bond in double the amount likely to come into the hands of such officers, conditioned for the faithful performance of his duties in receiving, holding, disbursing and accounting for any moneys coming into his hands as aforesaid; the sufficiency of the surety or sureties to be determined by the board of commissioners, which surety or sureties may be a corporation or corporations authorized by the law of the State to act as surety on official bonds; and the treasurer of the colony is authorized to pay the cost of such indemnity upon the order of the managers out of any moneys in his hands appropriated for the use of the colony.

Sec. 22. The steward, under the direction of the superintendent, shall make purchases for the colony, preserve the original bills and receipts therefor, keep full and accurate accounts of same, and of all orders drawn upon the treasurer, make contracts in the name of the superintendent with employes, keep the account of the patients, and furnish the treasurer every month with copies of such as fall due; make monthly abstracts of his accounts to the last day of the month preceding that in which the quarterly meeting of the commissioners is held, for the treasurer and commissioners; be accountable for the

careful keeping and economical use of furniture, stores and other articles purchased for the colony and make annually during the third week in October, and furnish to the managers a true and perfect inventory, verified by oath, of the personal property belonging to the colony with an appraisement thereof, made under oath or affirmation by himself, and two suitable persons, whom the commissioners shall appoint.

Sec. 23. The board of commissioners shall have police jurisdiction within the grounds owned by the State, and it shall have the power to appoint one or more persons, who shall possess the same power and authority on the premises and within the limits named as constables now possess in criminal cases. Said person or persons so appointed shall have authority to arrest all persons trespassing on said grounds or violating the laws of the State, who shall be immediately taken before some court having jurisdiction thereof to be dealt with according to law. Said person or persons so appointed shall also have authority to arrest and remove from said premises any person violating the rules and regulations adopted by said commissioners. Before entering on the discharge of his duties every such person hereby invested with powers of constable shall give bond and take the same oath of office as is by law required of constables and shall in addition to fees allowed constables receive such compensation as may be prescribed by the commissioners.

Sec. 24. Any officer, relative or friend, sending a patient to the colony shall see that such patient is in a state of bodily cleanliness, comfortably clothed, and provided with suitable raiment as the commissioners may require in their by-laws; and that such patient has not been exposed to, nor is suffering from any contagious disease.

Sec. 25. Officers, except the secretary and treasurer, shall constantly reside in the colony and be designated as resident officers. Included among such resident officers shall be a teacher and such assistant teachers as may be necessary, whose duty it shall be to teach, educate and mentally train such patients as are within the school age, and whose mental condition permits them to be taught and trained; the superintendent of such colony shall provide such school houses and school facilities as will enable the teachers to perform their duties efficiently.

Approved Nov. 23, 1907.

Official:

Frank N. Julian, Secretary of State.

Correspondence.

A MATTER FOR CONSIDERATION.

To the Editor:

I am informed that a certain hospital in this city has an arrangement with certain labor unions whereby the members of the unions can pay from 15 to 25 cents a month and secure hospital service and also medical and surgical service free of further charge. It occurs to me that the staff of the hospital in rendering free medical and surgical service to this class of patients, who are able to pay reasonable fees, is doing an injustice to the other members of the profession and violating the spirit if not the letter of our code of ethics. I would be glad if you would call the attention of the profession to this through your journal that the matter may be taken up for consideration if desirable.

Yours fraternally,

Birmingham, Ala. T. L. Robertson, M. D.

STATE BACTERIOLOGICAL AND PATHOLOGICAL LABORATORY.

Office of the State Board of Health
Montgomery, Ala., Dec. 16, 1907.

To the Editor of the Alabama Medical Journal:

The increased appropriation made by the last legislature to the State Board of Health has placed it within the power of the board to enlarge the sphere of its work in several very much needed directions. One of these directions will be the establishment of a State Bacteriological and Pathological Laboratory.

The governor having recently assigned to the board a commodious and suitable room in the capitol for the purpose, I am glad to be able to announce to the profession that plumbers and carpenters are now at work, and as soon as the room can be put in order it will be supplied with a superb bacteriological and pathological equipment, the object being to assist the physicians of the State in the scientific study of disease.

Whilst many of the physicians of the State are already equipped for such study, I am sure that the announcement just made will be received with hearty congratulations on all sides.

Dr. E. M. Mason, a son of Rev. J. M. Mason, LL.D., Presiding Elder of the Eufaula District, and a brother of Dr. J. M. Mason, of Birmingham, has been selected to take charge of the laboratory.

Dr. M—— received his academic training at the Alabama Polytechnic Institute at Auburn, where, after graduating, he devoted two years to post-graduate study. During one of these years he served as an assistant teacher in the departments of biology and pharmacy and during the other, in the absence of Prof. Miller, he acted as professor of pharmacy, thus laying a very broad and solid foundation for the study of medicine. He then entered the Medical Department of the Johns Hopkins University, one of the foremost medical schools of the world, where after four years of study he graduated with such rank as to entitle him to a year's residence in the hospital of that renowned institution.

Before entering upon his hospital service he made a visit to Europe, availing himself of opportunities of seeing the methods of study and investigation pursued in some of the best laboratories in the world.

He has but recently completed his service in the Johns Hopkins Hospital, and is now awaiting the completion and equipment of our laboratory to take charge. With such training as he has had, and being a close and deeply interested student of scientific medicine, we may confidently expect from him efficient and fruitful service in the field to which he has been assigned.

In addition to doing work in the laboratory here, Dr. Mason will be subject to call into any part of the State whenever the physicians of a locality may need such microscopic aid in the study of disease as he may render. For such visits he will be supplied with a field equipment adequate for such investigations as may be required.

Due notice will be given to the profession of the State when the laboratory is ready, which notice will be accompanied by a copy of rules to be observed and by instructions as to the manner in which specimens for examination may be transmitted to the laboratory.

Any member of the Association who reads this notice and feels interested will do a grateful courtesy by thanking the members of the legislature from his county for their liberality in supplying the State Board with the means of giving the profession and people of the State the benefits which the scientific study of disease and its modes of propagation may confer.

Yours,

W. H. Sanders,
State Health Officer.

Editorial.

W. H. BELL, M. D., Editor.

COLLABORATORS:

T. W. Ayers, M. D., Hwang-hien, via Chefoo, China.
J. T. Searcy, M. D., Tuscaloosa
L. C, Morris, M. D., Birmingham.
J. A. Goggans, M. D., Alexander City.
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B. L. Wyman, M. D., Birmingham
Thomas D. Parke, M. D., Birmingham, Ala.
W. H. Wilder, M. D., Birmingham,
D. F. Talley, M. D., Birmingham.

The Journal will be mailed on or about the 15th of the Month. Subscribers failing to receive it promptly will please notify us at once

We cannot promise to furnish back numbers

SUBSCRIPTION $2.00 A YEAR, IN ADVANCE

The editor is not responsible for views expressed by contributors.

All communications should be addressed to THE ALABAMA MEDICAL JOURNAL, 109½ N. 20th St , Birmingham, Ala.

A Grave Injustice.

There is perhaps no institution that renders greater service to humanity in any community than a well equipped hospital properly managed. The writer would be the last person in the world to say or do anything that would be hurtful to such an institution, and in saying what we do, we do not mean in the slightest to do harm to the name or influence of any of the hospitals of this community or State, nor to reflect upon the staff of physicians and surgeons of any. But we simply desire to call attention to an evil to which our attention is directed in a letter published in this issue of the Journal from Dr. T. L.

Robertson, and which is practiced by one of the leading hospitals of this community and its staff, which does injustice not only to the hospital itself and its staff of physicians and surgeons, but also to the doctors of the community and surrounding country, to the patients and patrons of the hospital and the public at large. By calling attention to this evil we hope to arouse sufficient interest to cause its eradication before greater harm has been done to the profession and the people than has already resulted.

The evil referred to is the custom established in recent years by one of the hospitals of this city of collecting from certain labor unions and organizations the small sum of ten or twenty-five cents for each member of such union per month, and giving therefor to the member or his family in case of accident or sickness not only hospital service, nursing, medicine, surgical dressings, etc., but also the doctor's or surgeon's services, the doctor or surgeon on the staff receiving nothing at all in the way of fees.

Now if these were strictly charity cases we would raise no objection whatever. But such is not the case, the patient in most cases being well able to pay a good fee. Take an instance: A man in one of the mining camps in this or an adjoining county happens to an accident or has an attack of some illness, say, requiring an operation. He belongs to the union which pays 25 cents per month for each member into this hospital fund. He earns from $100.00 to $150.00 per month, and is by no means an object of charity. He consults his local surgeon, who tells him an operation is necessary, and that his fee for doing this operation will be $50.00. He replies that he pays into this hospital fund and can go to this hospital and get, not only hospital service, but the service of one of the best surgeons of Birmingham *free!* He does this. The local surgeon loses a fee for an operation which he is thoroughly competent to do, and the surgeon on the hospital staff does the opration and gets absolutely nothing for it.

The following instance, which actually occurred, has been brought to our attention recently: A local surgeon who resides in one of the mining camps near the city, who has fully qualified himself to do surgical work, being called on to perform a herniotomy, informed the patient that his fee would be $150.00. The patient refused to pay this fee, saying he could get the operation done at one of the hospitals in

this city free of cost, as he was paying the monthly dues of 25 cents. The surgeon in this case was compelled to reduce his fee to $20.00 in order to retain the case.

Thus we see that this custom is very plainly an injustice to the local surgeon. It is equally unjust to the staff surgeon, who, to hold his position on the staff, is required to render free service to a man, thoroughly able to pay a reasonable fee, thus depriving the local surgeon of his fee with no benefit to himself.

This is unjust to the hospital also in that the outside doctor or surgeon is made to a certain extent unfriendly to the hospital. It is unjust to the patient and to the public from the fact that they can get competent medical or surgical service without paying for it.

In regard to the hospital collecting the monthly sum for hospital service we have no criticism. But we do think the doctor should have a reasonable fee for his services. The honor of being on the staff is not to be considered as in any manner a substitute for fees. Sifted to its last analysis it is simply a form of lodge practice and is a violation of the spirit of our ethics. In the name of justice, for the best interest of the profession and the hospitals, and for the welfare of the public, we ask the staffs of the various hospitals of Alabama to refuse to be a party to this evil. We ask the profession to stand solidly together against injustice in this or any other form.

About Ourselves.

With this issue of the Journal we begin a new year, it having been under the control of the present editor for the past twelve months. We desire to thank our patrons, both subscribers and advertisers, for their support and patronage during the past year and ask a continuation of the same. We have tried to give our readers a good Journal, and believe our efforts have not been in vain. We appreciate the support given us by our contributors, as we realize that their contributions have added materially to the worth of the Journal.

We have plans which we expect to carry out during the next year which we believe will add much to the value of the Journal for the organized profession of Alabama. We want to make the Journal a necessity for every doctor of the State; and we ask the continued cooperation of our friends that this desire may be realized.

Doctor, if you know of a physician who is not a subscriber will you not ask him to allow you to send us him name? Our subscription list has greatly increased during the past year. We ask your help to still further increase it. Also, please do not forget that we have to pay our printer, and that the beginning of the year is a good time to send us a check for your own renewal. It will be gratefully received, and by sending it promptly you will aid us in carrying out our plans of more rapidly improving the Journal.

We extend to all the greetings of the season and wish for all a happy and prosperous year.

The State Bacteriolical and Pathological Laboratory.

We publish in this issue a letter from our State Health Officer, Dr. W. H. Sanders, containing the information that the State Board of Health is preparing to establish and equip a bacteriological and pathological laboratory. This was made possible by the increased appropriations made for the use of the Health Department by the last legislature.

In our opinion no appropriation made by the legislature will result in greater good to the people of Alabama than that which makes it possible for our State Board of Health to undertake this important work. The State is to be congratulated on this advanced step taken by the Board of Health, and we trust that each physician of the State will, as suggested by Dr. Sanders, express to the members of the legislature from his county his appreciation of their liberality, thus enabling the Board to practically exemplify the wisdom of the plans of our public health system and render it of further practical benefit to our people.

A Warning Against Life Insurance Agents Who Attempt to Defraud the Doctor.

The following extract from a letter from a professional friend, who is a prominent physician in one of the larger counties of Alabama, is self-explanatory. The determination of the big life insurance companies to cut down the fees allowed doctors for examining applicants for insurance was so unfair and unbusinesslike that it failed.

The medical journals did much to arouse opposition to the measure and cause such concerted action on the part of the profession that a good many companies have receded from their position of false economy, and have recognized the fact that they started in to economize in the wrong direction.

Now that many of the companies have recognized this, the members of the profession cannot afford to allow themselves to be gulled by any of those who have not, or their agents. We deem the only thing necessary now is to call attention to the attempt to impose upon the doctor, so that others may be warned. The doctor failed to give the name of the company and agent attempting thus to defraud him. He says: "I wish you would warn the doctors of Alabama through your Journal against agents of life insurance companies who come around and tell you that their company pays $5.00, and after making the examination you find that the company pays only $3.00. I was recently gulled into making three examinations this way and only secured my money by holding up the fourth until I could get a special agreement with the company."

Officers of the Jefferson County Medical Society Elected for 1908.

At the last meeting of the Jefferson County Medical Society the following officers were elected for the year 1908: President, Dr. Lewis Whaley, Birmingham; Vice-president, Dr. W. F. Black, Sayreton; Censor, Dr. D. F. Talley. This society has had a most prosperous and successful year, as shown in the retiring message of Dr. B. L. Wyman, the former president, and in the reports of the secretary and Treasurer, Dr. A. F. Toole, and in the report of the Board of Censors, which we publish elsewhere in this issue. The next year promises to be of special interest also under the leadership of the officers elected with the enthusiastic co-operation of the 237 members.

Arrangements for the annual smoker at the Hillman Hotel on Monday evening, Dec. 30th, are being made.

Personal Notes.

Drs. Jno. Lanford and C. M. Rudolph, assistant physicians at the insane hospital, Tuscaloosa, were in the city on the 12th inst.

Dr. James S. McLester, 830 South Twentieth St., Birmingham, wishes to announce that he will be absent from his office for purposes of study October 1, 1907, to October 1, 1908.

Dr. B. D. Sibley announces that he has moved his office to the second floor of the First National Bank Building, rooms 227 and 228, where he will continue the practice of eye, ear, nose and throat work.

Dr. E. Leroy Napier has recently opened offices in the First National Bank Building in this city. He will limit his practice to diseases of the digestive organs.

Among the doctors from Alabama who are doing post-graduate work at the New Orleans Polyclinic are Dr. C. R. Rushton, Luverne; Dr. W. W. Grubbs, Enterprise; Dr. W. T. Hamilton, Mobile, and Dr. B. C. Chalker, Cottonwood.

The following out of town doctors have been recent visitors in Birmingham: Dr. J. E. Garrison, Dr. R. H. McGehee, Abernant; Dr. W. G. Jones, Drifton; Dr. J. I. Reid, Aldrich; Dr. D. L. Wilkinson, Montevallo.

The death of the following well known and prominent physicians of Alabama has occurred during the past month: Dr. A. W. Sims, of Birmingham; Dr. J. E. Pearson, of Sylacauga; Dr. W. S. DuBose, of Columbiana, and Dr. F. E. Gordon, of Anniston.

Dr. Chas. Wardell Stiles, of the U. S. Public Health and Marine Hospital Service, Washington, D. C., was in the city on the 2nd, and delivered a most interesting and instructive address before the Jefferson County Medical Society on "The Economic Side of the American Hook-worm Disease."

Dr. J. A. Howle, of Eclectic, Ala., and Miss Pearl Willingham, of Wetumpka, Ala., were married in the First Baptist Church, of Wetumpka, on the evening of Wednesday, Dec. 18th. The editor of the Journal acknowledges an invitation to be present, and extends congratulations.

Dr. Lewis Coleman Morris and Miss Bessie Jemison, both of Birmingham, were married at the home of the bride at Glen Iris, this city, on the evening of December 11th. They left the same evening for New Orleans and Gulfport, and will also visit New York and other eastern points before their return.

Dr W. H. Sanders, the State Health Officer, of Montgomery, stopped over for a few hours on his return from Chicago on the 13th inst. where he had been attending the conference of the Committee on Medical Legislation and the National Legislative Council of the American Medical Association. At this conference Dr. Sanders gave an address on the relation between federal and State control of public health outlining the public health system of this State, explaining its advantages and recommending its general features.

ANAEMIA.

The consensus of modern scientific opinion is that anæmia is but a phase of malnutrition. Blood poverty is merely incidental—iron can never fulfill all the requirements for treatment. Moreover, there is more than sufficient iron in an ordinary daily diet to overcome the worst form of anæmia known—*if it could be assimilated.* Dujardin Beaumetz proved this fact and struck the keynote of the successful treatment of impoverished blood, *i. e.,* promote assimilation of food, and not only the blood poverty, but malnutrition in general will be overcome. This is the rational and scientific reason for the universally acknowledged value of Gray's Glycerine Tonic Comp. in all forms of anæmia. Comparative clinical tests have proven—time and time again—that Gray's Glycerine Tonic Comp. will cure many of the most rebellious cases of anæmia, even those that have resisted treatment by practically every known form of organic and inorganic iron.

Obituaries.

DR. ARCHIE W. SIMS.

Dr. Archie Woodward Sims was born in Virginia and died in Birmingham Nov. 26, 1907. He graduated at the Birmingham Medical College in 1901, passed his examination before the County Board at once and was admitted to the practice of medicine which he began with encouraging prospects in the city. For a time he acted as Supervisor for the Jefferson County Board of Censors and also as Secretary of the Jefferson County Medical Society. He gave promise of active usefulness in his professional work until his failing health, the result of valvular disease of the heart, laid him aside from its busy duties. He then conceived a plan of interesting the many physicians of the city in the location of a large building which was to be erected for the purpose of giving the physicians of the city a permanent office home with which they would be identified and at the same time by voluntary subscription on their part to establish a pharmacy which was to be one in fact and purpose. The various stockholders were to share in any profits arising from the conduct of the business. This plan in which he was to be the directing head failed to mature on account of his failing health—a conception which, if carried out, would probably have been a large success. Intensely fond of his professional work, of pleasing address, of good ability, he made friends and if life had been spared would have attained a desirable success. In feeble health while still professionally engaged, an apoplectic stroke cut short his career of usefulness.

Within the last year he married Miss Charlotte Badger, of Owensboro, Ky., who is left to mourn the memory of a fond and devoted husband.

Dr. Sims was an active Mason and devoted much time to the study of its practical workings, having reached the 32d degree. He was also a member of the Shriners and Knights of Pythias to which orders he gave ready service. Largely through his own exertions he paved the way for the practical study of medicine, overcoming all the difficulties in his way till he obtained that which he sought, verifying the fact that "there are no obstacles to him who wills."

Our death roll grows with the passing years—the inevitable comes

to all. Let those of us now active contemplate with serenity the hour when our labors shall cease and fill the days still left to us with such activities as shall be acceptable in our daily round to God and our fellow man.

Be it resolved, That as a Society we mourn the departure of our friend and colaborer, and that the secretary be instructed to furnish a copy of this memorial to his family, and to the Alabama Medical Journal for publication. E. H. Sholl, M.D., Chairman Committee.

DR. W. S. DuBOSE.

Resolutions passed by the Shelby County Medical Society at its Montevallo Meeting, Nov. 12, 1907.

The death angel has again visited our society and removed from our midst our brother, Wilds Scott DuBose, who died on the 31st day of August, 1907.

He was born in Darlington District, S. C., Jan. 11, 1836. He graduated at the Atlanta Medical College in the year 1858. He was engaged in the active practice of his chosen profession the remainder of his life.

Soon after the civil war he moved to Columbiana where he resided till a short time before his death, in fact, at his death he claimed Columbiana as his home. His wife having died about two years before his death, he was survived by three sons and two daughters.

He was a consistent communicant of the Columbiana Presbyterian Church.

He was extensively known in this part of the State of Alabama. He was a high type of Southern gentleman. He was in his associations with his friends generous, genial and kind, and leaves many friends to mourn his loss.

In the death of Dr. DuBose the Shelby County Medical Society lost a faithful member. In recording his death it reminds us as his surviving brethren of the old scripture, "Be ye also ready."

We tender our heartfelt sympathy to his bereaved family and many friends.

Be it resolved, That this memorial be spread upon the minutes of the Shelby County Medical Society and that a copy be sent to the Alabama Medical Journal for publication

J. R. Morgan, M.D.,
A. T. Rowe, M.D.,
J. H. Williams, M.D..

Book Notices.

Compend of Surgery. For Students and Physicians, Including Minor Surgery and a Complete Section on Bandaging. By Orville Horwitz, B. S., M. D., Professor of Genito-urinary Surgery, Jefferson Medical College; Surgeon to St. Agnes Hospital; Fellow of the College of Physicians, Philadelphia, etc., etc. Sixth Edition, Revised and Enlarged. One hundred and ninety-five illustrations and one hundred and four formulae. Philadelphia. P. Blakiston's Son & Co., 1012 Walnut St. 1907. $1.00, net.

This new edition of Surgery, by Dr. Howitz affords a striking illustration of the growth in subject treatment of "Blakiston's Quiz—Compend Series." The first edition made a book of 132 pages, sparsely illustrated. It contained questions and reference answers and aimed to completely cover, in terse form, surgery as it was known at that time.

The new edition brings the subject fully down to the present date. Though written with equal conciseness, so great has been the advance in surgical knowledge in the interim between the publication of the first and present edition that it has been found impossible to condense the book within less than 334 pages, with 195 illustrations. The price, notwithstanding, has been kept at the original figure, one dollar.

Abdominal Hernia—Its Diagnosis and Treatment. By W. B. De Garmo, M. D., New York. Professor Special Surgery (Hernia), New York Post-Graduate Medical School and Hospital; Fellow New York Academy of Medicine; Member American Medical Association, New York State and County Medical Society of Virginia. Philadelphia and London. J. P. Lippincott Company. $5.00, net.

This book is especially addressed to the physician to whom the first appeal for aid is usually made by those afflicted with hernia. As the author states, the surgeon has plenty of literature to guide him in his part of the work, while the physician, upon whom many times the full responsibility of the case must rest, finds little practical aid from

that source in any language. To the latter this book furnishes useful suggestions regarding the diagnosis and treatment of abdominal hernia, and to those we commend it as work of great practical value.

The author says that he realizes his liability to criticism for omitting mention of other forms of operation, but justifies himself in the fact that those given have shown the best results. He has attempted to make clear the principles involved in curative measures rather than to suggest any special method.

The book is neatly bound and handsomely and fully illustrated, the illustrations being made largely from patients under treatment of the author.

We acknowledge the receipt of *Card Case and Insurance Policy* from the Denver Chem. Mfg. Co., manufacturers of "Antiphlogistine," of a neat leather bank note and card case containing an insurance policy for $2500 from the North American Accident Insurance Company of Chicago.

This is a practical way in which this progressive firm remembers its friends at this holiday season, and one that is thoroughly appreciated by the recipient.

Beginning with January *The American Journal of Urology* will be edited by Dr. William J. Robinson, editor of the Critic & Guide, Therapeutic Medicine, etc. The journal will be enlarged in scope so as to include venereal and skin diseases and there will be added an abstract department which will review the genito-urinary and dermatologic literature in every civilized language. The subscription price has been reduced to $2.00. The address has been changed to 12 Mt. Morris Park West, New York City.

PAMPHLETS RECEIVED.

Souvenir of the first Annual Ball of the "Skull and Bones Club," St. Louis College of Physicians and Surgeons.

Gonorrheal Prostatitis. By J. Bayard Clark, M. D., New York City. Reprint from Jour. Amer. Med. Association.

Fig. 413. From the New edition of Morris' Anatomy, enlarged P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia.

Gonococcic Infections, and the Physician's Responsibility. By J Bayard Clark, M. D., New York. Reprint from the N. Y. Med-Journal.

A Medical Career and the Intellectual Life. By Casey A. Wood, Chicago. Reprinted from the Bulletin of the American Academy of Medicine. Aug., 1907.

Trachoma, Its Character and Effects. By Passed Assistant Surg., T. Clark and Passed Ass't. Surg., J. W. Schereschewsky. Prepared by direction of the Surgeon-General. Washington Government Printing Office. 1907.

The Nervous System of Jesus. By Salvarona, Assistant of the American Institute for Scientific Research of New York. 50 cents, net. Pennsylvania, Langhorn, Bucks County. Henry G. Walters, Pub., 1907.

Squibb's Materia Medica, the 1908 edition of their Price List. It contains a complete alphabetical list of the Squibb products, embracing the articles in the U. S. Pharmacopoeia (viii Revision) and the National Formulary, together with the non-official chemicals, pharmaceuticals, tablets and newer remedies in general use, setting forth their origin; latin and English titles; synonyms; physical and chemical characteristics; incompatabilities; antidotes; therapeutic indications; doses, etc. Published by E. R. Squibb & Sons, New York and Brooklyn.

Miscellaneous Notes.

PHYSICIANS ATTENTION.—Drug stores for sale on easy terms, etc., United States, Mexico, and Canada. Drug store positions. F. V. Kniest, Omaha, Nebraska.

SOME OF THE INDICATIONS FOR SANMETTO ARE: Vesical irritation and atony; enuresis due to atony; incontinence of urine in children due to a weak bladder; dribbling of the urine in the aged, not due to paralysis or growths; urine expelled upon exertion, as coughing; cystitis; catarrhal discharges from bladder or genitalia of male or female; seminal emissions; prostatitis, enlarged prostate and pre-senility.

LA TRIBUNE MEDICALE—OCT., 1907.

Acne Papulosa.—This very troublesome skin affection is much improved by the internal use of cerevisine in teaspoonful doses continued for some few weeks and by local application of peroxide of hydrogen and cerevisine. Copleston reports cases which have been almost cured within a fortnight, which had resisted all other treatment for many years, including X-ray treatment.

A GENERALLY USEFUL ANTISEPTIC.

Tyree's Antiseptic Powder is one of the most generally useful antiseptic powders for hospital practice or in the office local treatment of leucorrhœa arising from various causes, as uterine and vaginal catarrhs, that has ever been introduced. It is valuable as well in gonorrhœa, gleet, and such diseases of the mucous passages. It is serviceable also in dysentery, in catarrhal inflammations of the nose, throat, mouth, gums, etc. Dr. W. M. Gray, Microscopist to the Army Medical Museum at Washington, D. C., by tests, has proven conclusively its bactericidal action as to the anthrax bacillus, the staphylococci of pus, etc. It combines the qualities of such agents as salicylic and boric acid, so that its application to diseased mucous surface has a mild, stimulating and astringent effect in the rapid healing of diseased tis-

sues. While it may be applied as a powder, when circumstances demand, the economy of its use consists in the fact that water (so as to make from 10 to 50 per cent solution) may be added at the time its use may be required. A trial package will be mailed free of charge to physicians if they will send their name and address to J. S. Tyree, Chemist, Washington, D. C.

ETHICAL ELEGANCE.

To obtain an antiseptic and germicide the equal of Bichloride and Carbolic without their dangerous features, has been a great study with the friends as well as the foes of these two corrosive agents. Dr. Tyree believes the problem is solved by the clinical and scientific tests made with Tyree's Antiseptic Powder. These tests, with the opinions of gentlemen eminently qualified to pass upon the therapeutic value of any chemical agent, are embodied in an interesting little booklet, entitled George Washington's Physician, which will be sent free. While Tyree's Powder has hitherto been largely confined to obstetrical and gynecological work, careful experiments in the hospitals of this country and London, indicate its equal value in general, rectal laryngeal and oral surgery, whether of operative or mechanical application.

Should you feel sufficiently interested, the doctor will, upon request, mail a sample of this great antiseptic. In this connection he assures the profession that this is not done with a view of securing names for publication. This is never done, as his antiseptic is strictly an ethical one. His sole object is to acquaint the profession personally with the great value of this remedy. For samples and descriptive literature, write Dr. J. S. Tyree, Chemist, Washington, D. C.

Troy, N. Y. Nov. 5, 1906.

The Anasarcin Chemical Co., Winchester, Tenn.

I received sample box of your Anasarcin Tablets and used them in my own family in a case of valvular disease, and renal stenosis. Such a pronounced localized edema of face on rising, and fingers; seldom in extremities or abdomen. Had used the usual remedies with no noticeable effect. Began with Anasarcin Tablets one hour before meals and on retiring. The result was most satisfactory, for on second day face and hands were normal and a better general condition of health has followed the continued use.

Elderly woman, fifty-six, had edema of feet, and ascites; mitral regurgitation. She was quite portly and I had little time or opportunity to examine heart; however found her in the distress of an attack of mitral regurgitation, followed by great agitation. Began the use of Tablets by crushing one and dissolving, giving solution of one every two hours. I was astonished at the rapid disappearance of the effusion, and the rapid betterment of my patients.

I have secured the tablets here in Troy, two boxes so far. I at first thought your literature rather strong, but now believe you are justified in all you claim. Very truly,

E. J. Fisk, M. D.

RELIEF IN RHEUMATOID CONDITIONS.

Dr. Pettingill, of New York City, under the head of "Intestinal Antisepsis," reports some excellent experiences, from which the following is selected:

"Every physician knows full well the advantages to be derived from the use of antikamnia in very many diseases, but a number of them are still lacking a knowledge of the fact that antikamnia in combination with various remedies, has a peculiarly happy effect. Particularly is this the case when combined with salol. Salol is a most valuable remedy in many affections; and its usefulness seems to be enhanced by combining it with antikamnia. The rheumatoid conditions so often seen in various manifestations are wonderfully relieved by the use of this combination. After fevers, inflammation, etc., there frequently remain various painful and annoying conditions which may continue, namely: the severe headaches which occur after meningitis, a 'stitch in the side' following pleurisy, the precordial pain of pericarditis and the painful stiffness of the joints which remain after a rheumatic attack—all these conditions are relieved by this combination called 'Antikamnia & Salol Tablets' containing 2 1-2 grs. each of antikamnia and of salol and the dose of which is one or two every two or three hours. They are also recommended highly in the treatment of cases of both acute and chronic cystitis. The pain and burning is relieved to a marked degree. Salol neutralizes the uric acid and clears up the urine. This remedy is a reliable one in the treatment of diarrhoea, entero colitis, dysentery, etc. In dysentery, where there are bloody, slimy dis-

charges, with tormina and tenesmus, a good dose of sulphate of magnesia, followed by two Antikamnia & Salol Tablets every three hours, will give results that are gratifying."

THE USE AND ABUSE OF CARDIAC STIMULANTS.

Hare (Therapeutic Gazette), "in this article the author discusses the common disregard of certain essential details concerning the action of cardiac stimulants. Physicians themselves probably suffer more as a class from this abuse. The 'tired heart' commonly existing among physicians usually receives at their hand excessive doses of digitalis instead of the indicated rest. Strong coffee and other adjuncts are also self-prescribed, causing an increase of the cardiac disorder. Another erroneous use of cardiac stimulants is their employment in a state of undue excitation in which condition cardiac sedatives are needed. Not uncommonly cardiac irregularity calls for small doses of aconite or veratrum ciride. Again a patient with feeble heart receives digitalis when in reality the cause of the feebleness lies in a degenerated heart muscles, which is incapable of gaining any advantage from this drug. In fact by contracting a blood vessel digitalis increases the labor of the heart. Under these conditions strophanthus or cactus, the action of which is cardiac, but slightly if at all vascular, should be used."—*Interstate Medical Journal.*

This is one of the numerous instances in which cactus is advantageously used. The expressions of the medical profession on Cereus Grandiflorus and Cactina Pillets, which truly presents the therapeutic properties of the drug in the highest form, are very encouraging. It seems that any drug that offers assistance in cardiac complications, and especially if it is devoid of the objectionable features of stronger cardiac remedies, should command the earnest attention of the bedside practitioner.

ALEXANDER MACTIER PIRRIE.

A Martyr to Science.

A career of great promise has been cut short by the untimely death of Mr. A. Mactier Pirrie. The son of the late Mr. Alexander Pirrie C.E., he was born on October 2nd, 1882. He obtained his B.Sc. with honours in anthropology at Edinburgh University in 1904, and

qualified as M.B., Ch.M., in 1906. He obtained the Carnegie Research Fellowship in anthropology and was appointed anthropologist to the Wellcome Research Laboratories at the Gordon Memorial College, Khartom. He went out to the Sudan in the autumn of 1906. Under the direction of Dr. Andrew Balfour, the director of the laboratories, Dr. Pirrie made his first expedition up the Nile to the southern limits of the Sudan, and penetrated to remote parts of the Bahr-el-Ghazal. His second expedition took him to the borders of Abyssinia. On both occasions he passed through some of the most pestilential regions of Africa in connection with certain anthropological and physiological researches, appertaining to tropical diseases, upon which the laboratories are engaged. Unfortunately he contracted tropical fever (kala azar), and was so prostrated as to be compelled to return to England, leaving Khartoum on June 17th last. He rallied from the effects of the fever from time to time, but was compelled to enter Chalmers' Hospital, in October. His death took place on November 12th. He was interred at the Dean Cemetery, Edinburgh, on November 15th. The Gordon Memorial College, Khartoum, Sir William Turner, Principal and Vice-Chancellor of the Edinburgh University, Mr. Wellcome and others, were represented, and sent wreaths. A resolution of sympathy has been conveyed to the relatives from the trustees of the Gordon Memorial College, and other expressions of sympathy have been received from the Liverpool School of Tropical Medicine, &c., &c. It is of interest to note that the first case of kala azar found in Africa, except a case in Tunis referred to by Laveran, was reported by Dr. Sheffield Neave, pathologist to the Wellcome Research Laboratories, Khartoum. Dr. Neave found the Leishman-Donovan body, the parasite of kala azar, in the splenic blood of a patient in the Omdurman Civil Hospital. The discovery is noted by the director in the second report of the laboratories. Dr. Pirrie presented a paper on his African expeditions at the last meeting of the British Association for the Advancement of Science, but was prevented from being present on account of his illness. He brought back a most valuable collection of objects of scientific interest. At intervals during his illness he was engaged on his report to the Carnegie Institute and the Wellcome Research Laboratories, Khartoum, for which institutions he acted jointly in the important work he carried out in the Sudan.—*Reprint from the "British and Colonial Druggist,"* Nov. 22, 1907.

THE SERUM TREATMENT OF EXOPHTHALMIC GOITRE.

Harriet C. B. Alexander* discusses the subject and reports thirteen cases. Four principal theories of the disease have been advanced: (1) That it is due to disease of the sympathetic nervous system; (2) that the seat of the malady is the medulla oblongata; (3) that it is primarily a disease of the thyreoid gland; and (4) that it is a neurosis.

Modern therapeutic measures have been largely based on the "thyreoid" theory. The results of partial strumectomy indicate that the successful removal of a portion of the thyreoid gland can lead to cure or to definite amelioration of the condition. On the theory that the thyreoid secretion normally neutralizes certain general metabolic poisons in the body, Moebius and others conceived of treating cases of exophthalmic goitre, in which there is presumably an excess of thyreoid secretion in the body, by introducing subcutaneously, or by the mouth, the serum of thyreoidectomized animals. It was hoped that the non-neutralized general metabolic poisons of such animals would nullify the toxic effect of the excessive thyreoid secretion. As to the treatment, experience has shown the great importance of general measures: complete rest for a time, fresh air, careful diet, mild balneotherapy, etc.

The name Thyreoidectin has been given to a preparation obtained under aseptic precautions from the blood of animals from which the thyreoid glands have been removed, and which is exhibited as a redish-brown powder contained in capsules, usually five grains each. Carefully conducted clinical trials seem to show that Thyreoidectin can be depended upon to control the characteristic symptoms of exophthalmic goitre. In most cases the patient experiences much relief from the restlessness, tremors, insomnia and other nervous symptoms so frequently present, and a gradual lessening of the frequency of the pulse rate, decrease in the size of the glands, and a diminution of the exophthalmos, with an increase of weight and a much better condition generally. The dose of Thyreoidectin seems to be one or more capsules after each meal, according to the judgment of the physician and the reaction of the patient.

In nine of the author's thirteen cases the size of the gland was materially reduced, and in every case improvement was observed with respect to one or more of the symptoms.

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*The American Practitioner and News, August, 1907.